PHILIPS 63TB5192

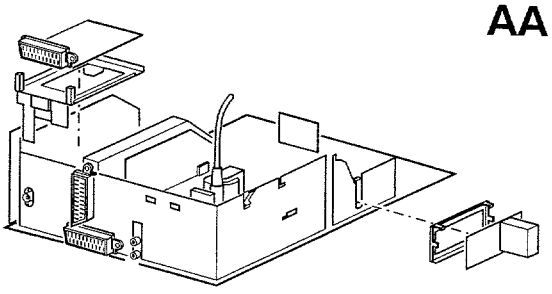
MODEL

SERVICE MANUAL

Colour television — Chassis

Service
Service
Service

GR 2.4
AA



CL 46532048/016
270694

ServiceManual

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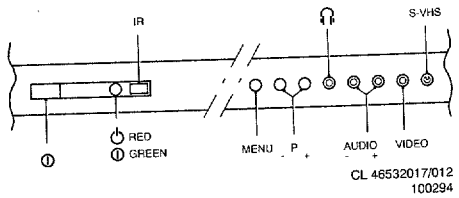
PCS 74 232 GB

PHILIPS

1. Technical specification

Mains voltag	:220 - 240 V (± 10%)
Mains frequency	:50 Hz (± 10%)
Aerial input impedance	:75Ω - coax
Minimum aerial voltage	:32µV
Maximum aerial voltage	:32mV
Pull-in range colour synchronization	:± 300Hz
Pull-in range horizontal synchronization	:± 300Hz

Local operation functions:



Programmes	: 0-89
VCR operation on programmes	: 0-89

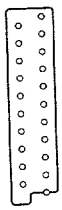
Indications:

- On Screen Display (OSD)
- LED:
  - standby (red)
  - operation (green)
  - RC5 reception (flashing yellow)
  - I^2C bus fault in µP (flashing white)

2. Connection facilities

1. Specification of the terminal sockets

EXT1/EXT2



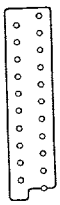
1	- Audio	⊖→	R (0,5V_{RMS} 1kΩ)
2	- Audio	→⊕	R (0,2 - 2V_{RMS}; 0,5 V_{nom}; ≥ 10kΩ)
3	- Audio	⊖→	L (0,5V_{RMS} 1kΩ)
4	- Audio	⊥	
5	- Blue	⊥	
6	- Audio	→⊕	L (0,2 - 2V_{RMS}; 0,5 V_{nom}; ≥ 10kΩ)
7	- Blue	→⊕	(0,7V_{pp}/75Ω)
8	- CVBS-Status (0-2V: int.; 9,5-12V: EXT-4/3; 4,5V-7,5V:EXT-16/9)		
9	- Green	⊥	
10	- -		
11	- Green	→⊕	(0,7V_{pp}; 75Ω)
12	- -		
13	- Red	⊥	
14	- -		
15	- Red /	→⊕	(0,7V_{pp}; 75Ω)
15	- C-SVHS	→⊕	(0,3V_{pp}; 75Ω)
16	- Status		(0-0,4V: FB-OFF;1-3V FB-ON; 75Ω)
17	- CVBS	⊖→	⊥
18	- CVBS	→⊕	⊥
19	- CVBS	⊖→	(1V_{pp}/75Ω)
20	- CVBS	→⊕	(1V_{pp}/75Ω){EXT1}
20	- CVBS/ Y-SVHS	→⊕	(1V_{pp}/75Ω){EXT2}
21	- Earth screen		

EXT4

1	- ⊥		
2	- ⊥		
3	- Y	→⊕	(1V_{pp}; 75Ω)
4	- C	→⊕	(1V_{pp}; 75Ω)

2x ◎	CINCH Audio	→⊕	L+R (0,2-2V_{RMS}; 0,5 V_{nom} ≥ 10kΩ)
1x ◎	CINCH CVBS	→⊕	(1V_{pp}; 75Ω)

EXT3



1	- Audio	⊖→	R (0,5V_{RMS}; 1kΩ)
2	- Audio	→⊕	R (0,2 - 2V_{RMS}; 0,5 V_{nom}; ≥ 10kΩ)
3	- Audio	⊖→	L (0,5V_{RMS}; 1kΩ)
4	- Audio	⊥	
5	- ⊥		
6	- Audio	→⊕	L (0,2 - 2V_{RMS}; 0,5 V_{nom}; ≥ 10kΩ)
7	- -		
8	- CVBS status 3	⊖→	(0-2V: int.; 9,5-12V: ext.)
9	- ⊥		
10	- -		
11	- -		
12	- -		
13	- ⊥		
14	- ⊥		
15	- -		
16	- -		
17	- CVBS	⊖→	⊥
18	- CVBS	→⊕	⊥
19	- CVBS	⊖→	(1V_{pp}/75Ω)
20	- CVBS	→⊕	(1V_{pp}/75Ω)
21	- Earth screen		

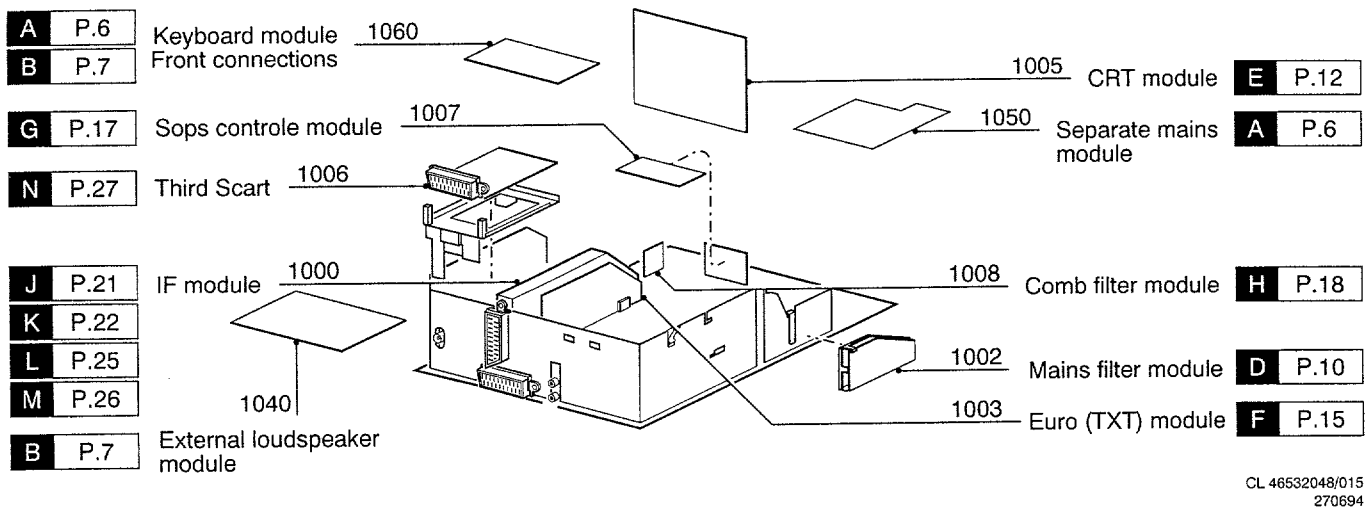
Audio out

2x ◎	CINCH Audio	⊖→	L+R (0,5V_{RMS}; 1kΩ)

Front

3.5mm 8Ω

PWB location drawing



3. Safety instructions, Maintenance instructions, Warnings and Notes

Safety Instructions for Repairs

1. Safety regulations require that during a repair:
   - the set should be connected to the mains via an isolating transformer
   - safety components, indicated by the symbol ⚠, should be replaced by components identical to the original ones
   - when replacing the CRT, safety goggles must be worn.

2. Safety regulations require also that after a repair:
   - the set should be returned in its original condition
   - the cabinet should be checked for defects to avoid touching, by the customer, of inner parts
   - the insulation of the mains lead should be checked for external damage
   - the mains lead strain relief should be checked on its function
   - the cableform and EHT cable are routed correctly and fixed with the mounted cable clamps in order to avoid touching of the CRT, hot components or heat sinks
   - the electrical resistance between mains plug and the secondary side is checked. This check can be done as follows:
     - unplug the mains cord and connect a wire between the two pins of the mains plug
     - switch on the TV with the main switch
     - measure the resistance value between the pins of the mains plug and the metal shielding of the tuner or the aerial connection on the set. The reading should be between 4.5 MΩ and 12 MΩ.
     - switch off the TV and remove the wire between the two pins of the mains plug
   - thermally loaded solder joints should be resoldered. This includes components like LOT, the line output transistor, fly-back capacitor.

Maintenance Instructions

It is recommended to have a maintenance inspection carried out periodically by a qualified service employee. The interval depends on the usage conditions.
- When the set is used in a living room the recommended interval is 3 to 5 years. When the set is used in the kitchen or garage this interval is 1 year.
- During the maintenance inspection the above mentioned "safety instructions for repair" should be carried out. The power supply and deflection circuitry on the chassis, the CRT panel and the neck of the CRT should be cleaned.

Warnings

1. In order to prevent damage to IC's and transistors, all high-voltage flashovers must be avoided. In order to prevent damage to the picture tube, it should be discharged using the method shown in Fig.3.1. Use a high-voltage probe and a multimeter (position DC-V). Discharge until the meter reading is OV (after approx. 30s).

2. **ESD**

   All ICs and many other semiconductors are sensitive to electrostatic discharges (ESD). Careless handling during repair can drastically shorten their life. Make sure that during repair you are connected by a pulse band with resistance to the same potential as the earth of the unit. Keep components and tools also at this same potential.

3. Be careful when taking measurements in the high-voltage section and on the picture tube.

4. Never replace modules or other components while the unit is switched on.

5. When making settings, use plastic rather than metal tools.
   This will prevent any short circuits and the danger of a circuit becoming unstable.

6. In order to prevent measuring errors, the heat sinks should not be used as reference points for measurements.
   The heat sink for the sound output amplifier (next to the channel selector) is connected to the -16 or -12 volts.

7. Together with the deflection unit and any multipole unit, the flat square picture tubes used form an integrated unit. The deflection and the multipole units are set optimally at the factory. Adjustment of this unit during repair is therefore not recommended.

8. The high-voltage cable in 21" units is glued in the line output transformer. This can therefore not be replaced.

Notes

1. The picture tube PCB has printed spark gaps. Each spark gap is connected between an electrode of the picture tube and the Aquadag coating.

2. Blackline units can be recognized by the thick, protected high-voltage cable. Non-blackline units have a thin, unprotected high-voltage cable.

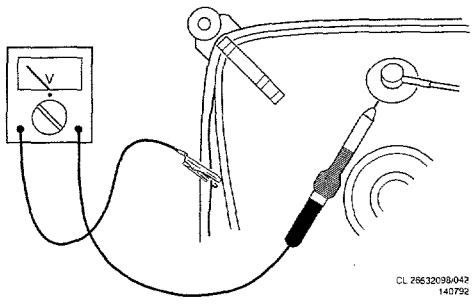


Fig. 3.1

P.12
P.6
P.18
P.10
P.15

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4. Mechanical instructions

1. Removing the back plate

It is only possible to remove the back plate after removing the screws on the top, side, possibly on the underneath **and possibly above the EXT 2 connection**. In the case of subwoofer units, the subwoofer speaker on the carrier panel should also be unplugged (see Fig. 4.2a).

2. Service position 1

Service position for module service and to measure test points
Unlock the chassis after the cables of the degaussing coil and any PIP module have been disconnected, and pull it backwards until all test points are accessible (see Fig. 4.2b).
In order to make the tuner and the IF/sound module accessible, the bracket above these modules can be removed (see Fig. 4.3). With the exception of one fault message, the unit continues to function normally when the PIP module is not connected.

3. Service position 2

Service position for repair
Place the chassis on the heat sink on the tuner side after service position 1 is reached (see Fig. 4.4).
Or in case of FL4 cabinet there is a service hook where the chassis with bracket can be hanged on
(see fig. 4.1). Be careful with the wiring!!

Warning: make sure that the heat sink of the sound output amplifier does not form a short circuit with the raster/line heat sink if the bracket of the third scart has been removed !

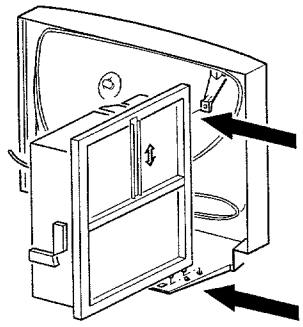


Fig. 4.1

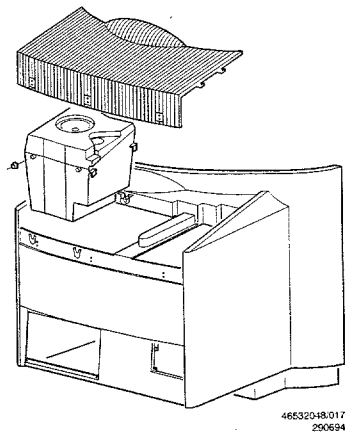


Fig. 4.2a

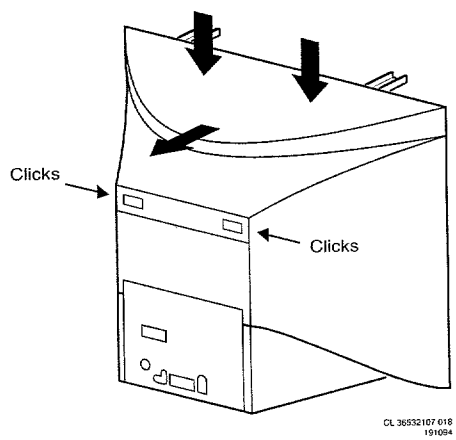


Fig. 4.2b

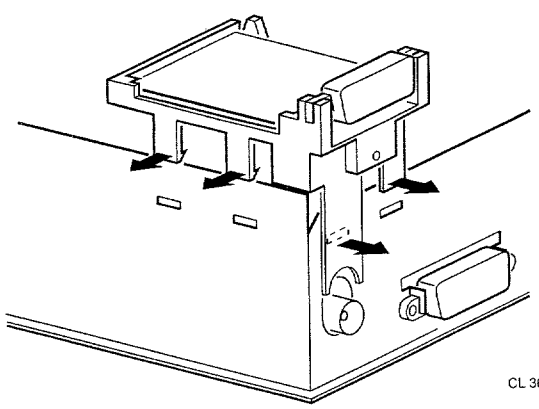


Fig. 4.3

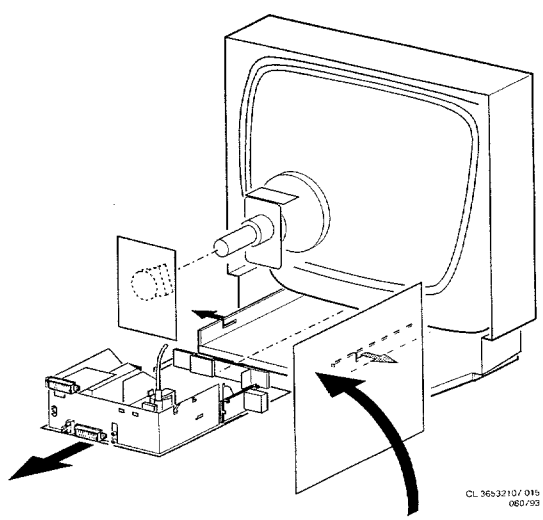
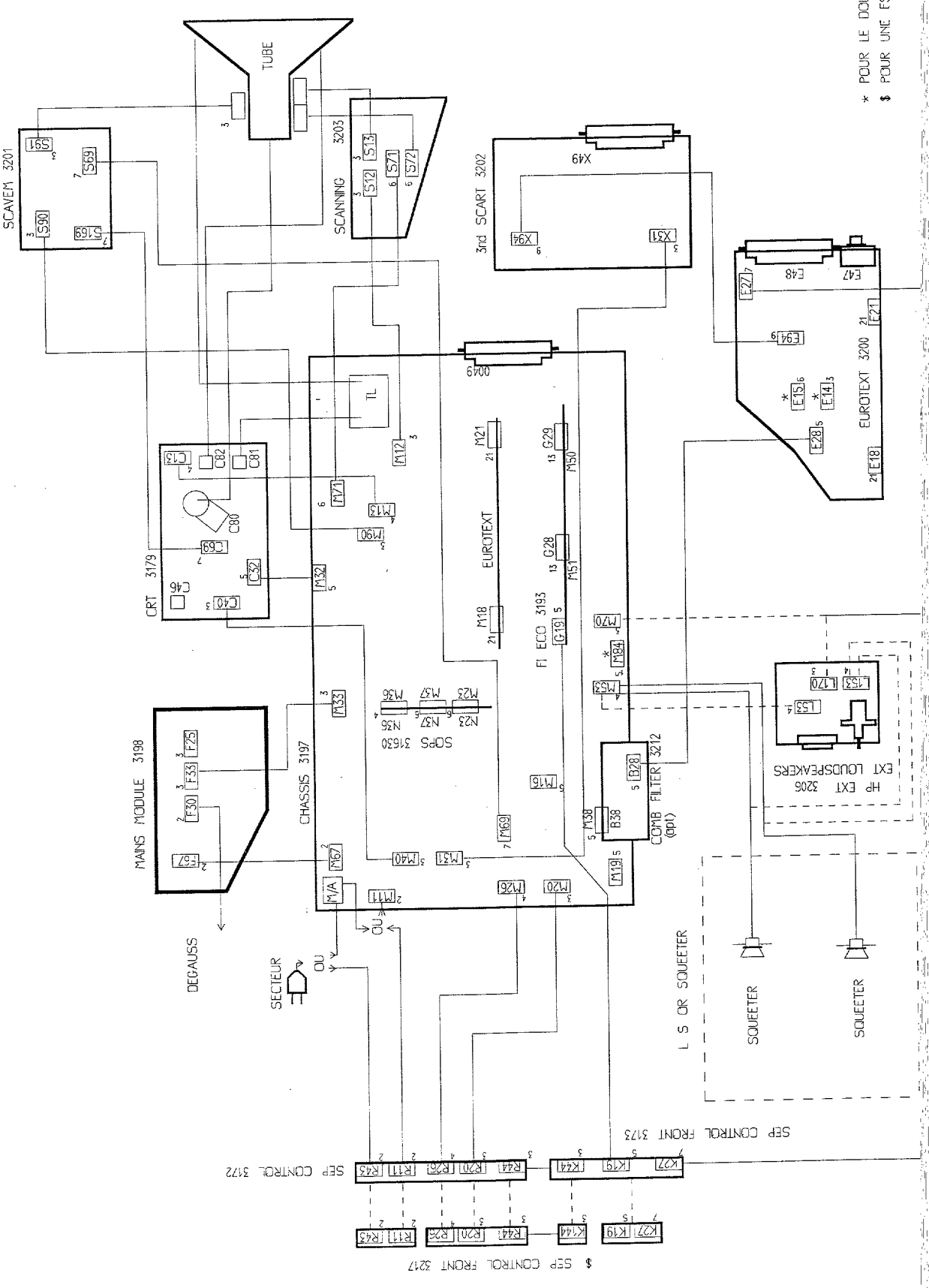


Fig. 4.4

Wiring diagram/Verdrahtungsschema/Schéma de câblage

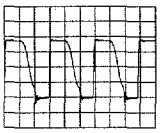


Oscillograms/Oszillogramme/Oscillogrammes

TP1 = DC 15V9

TP2 = DC -15V9

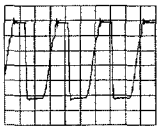
TP3



20V/div AC
5µs div

TP4 = DC 9V7

TP5

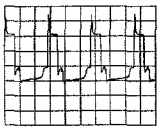


5V/div AC
5µs div

TP6 = DC 4V8

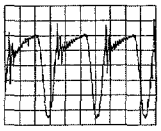
TP7 = DC 298V

TP8



2V/div AC
5µs div

TP9



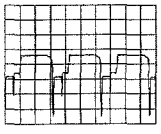
0.2V/div AC
5µs div

TP10 = DC 2V4

TP11 = DC 0V

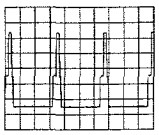
TP12 = DC 2V7

TP14



2V/div AC
20µs div

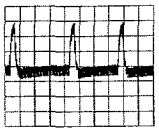
TP16



2V/div AC
20µs div

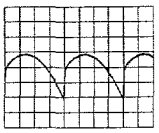
TP17 = DC 0V

TP18



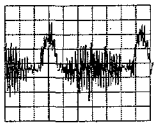
2V/div AC
5ms div

TP19



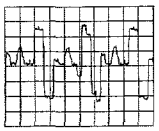
1V/div AC
5ms div

TP20



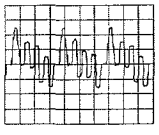
20mV/div AC
10µs div

TP21



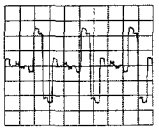
0.1V/div AC
20µs div

TP22



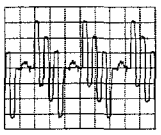
0.2V/div AC
20µs div

TP23



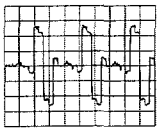
0.2V/div AC
20µs div

TP24



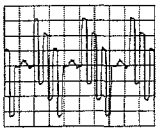
0.2V/div AC
20µs div

TP25



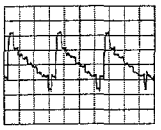
0.2V/div AC
20µs div

TP26



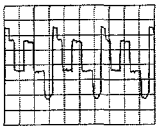
0.2V/div AC
20µs div

TP27



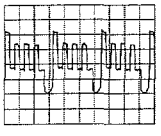
0.1V/div AC
20µs div

TP28



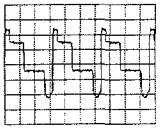
0.5V/div AC
20µs div

TP29



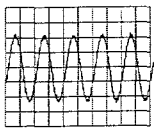
0.5V/div AC
20µs div

TP30



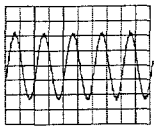
0.5V/div AC
20µs div

TP31



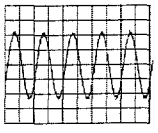
10mV/div AC
0.5ms div

TP32



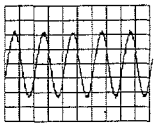
10mV/div AC
0.5ms div

TP33



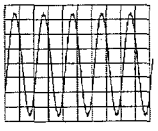
10mV/div AC
0.5ms div

TP34



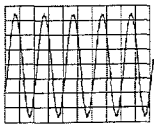
10mV/div AC
0.5ms div

TP35



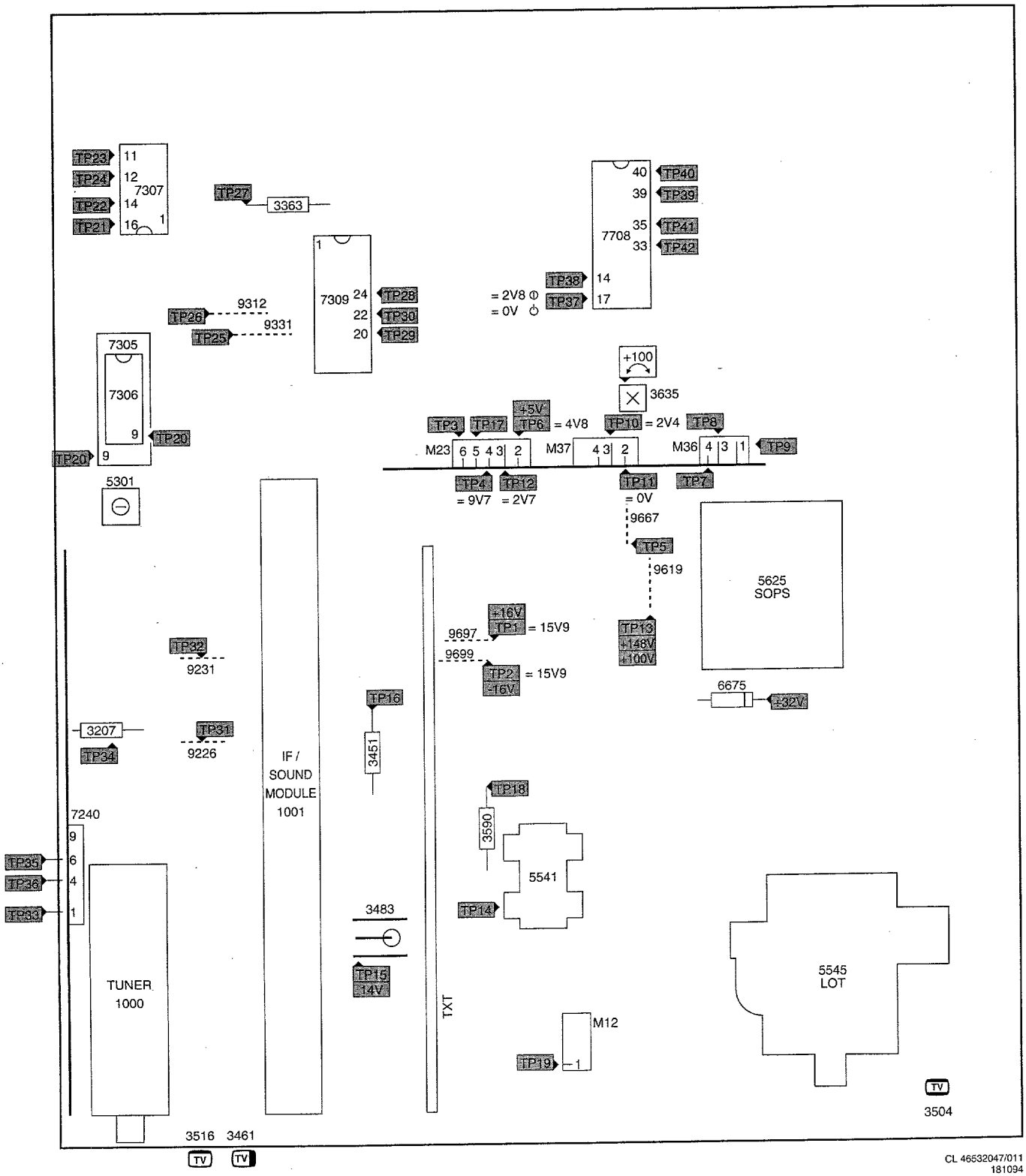
200mV/div AC
0.5ms div

TP36



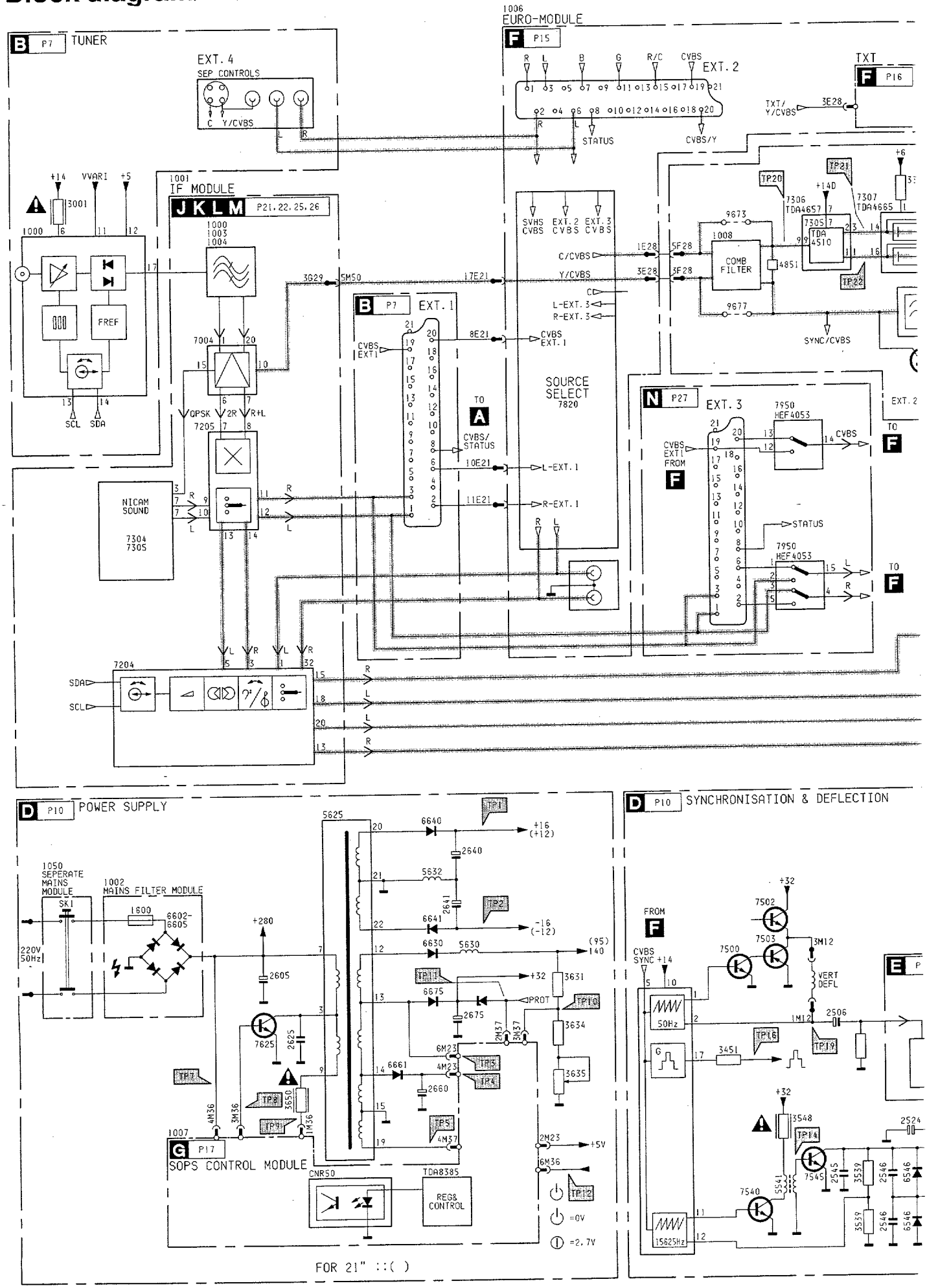
200mV/div AC
0.5ms div

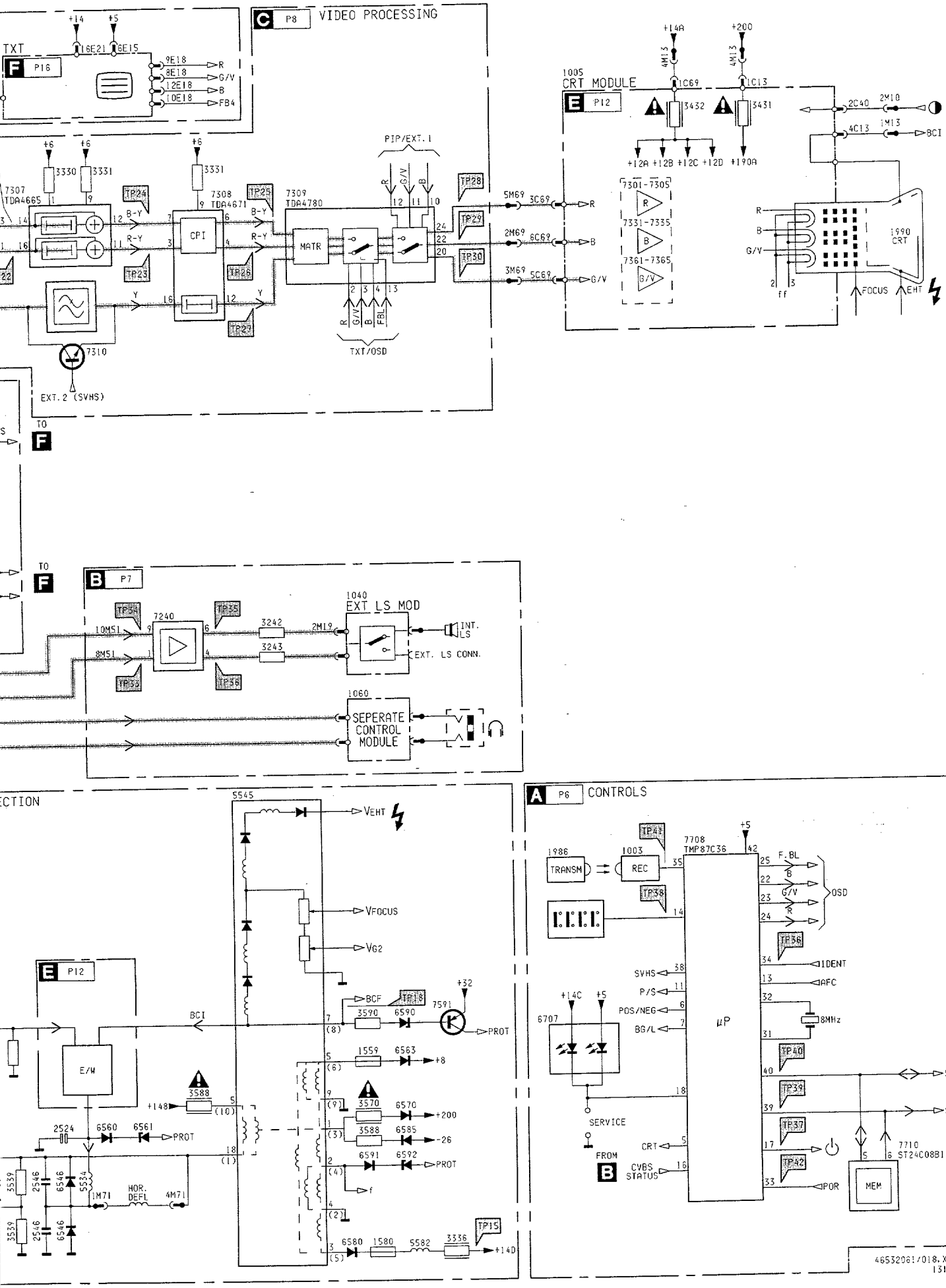
Test point overview/Übersicht Teststellen/Tableau des points à tester

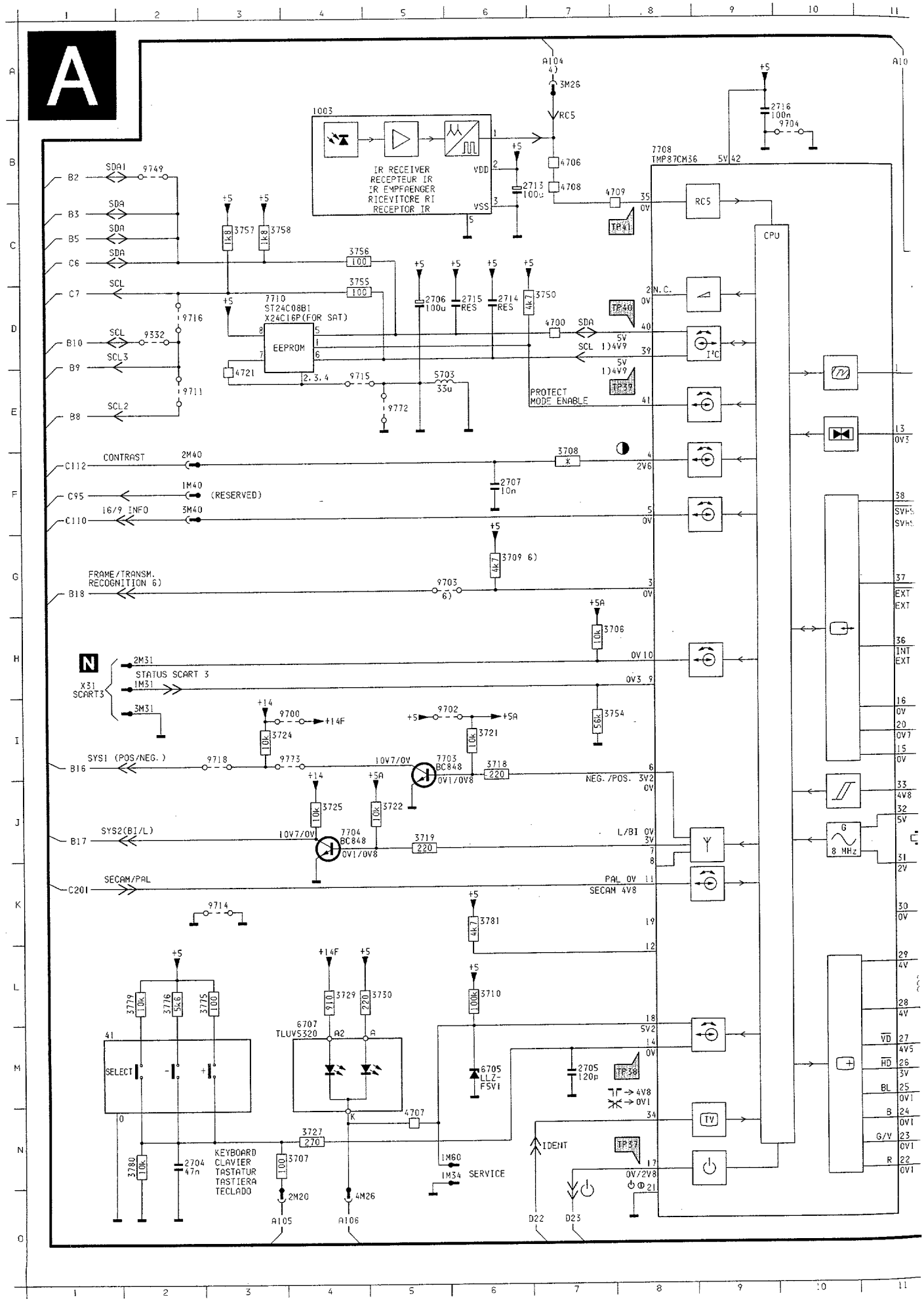


CL 46532047/011
181094

Block diagram/Blockschaltbild/Schéma-bloc




C P8 VIDEO PROCESSING
F P16
TXT
9E18 R
8E18 G/V
12E18 B
10E18 FB4
7307 TDA4665
7308 TDA4671
7309 TDA4780
CPI
MATR
PIP/EXT.1
TXT/OSD
7310
EXT.2 (SVHS)
TO F
1005 CRT MODULE
E P12
1990 CRT
FOCUS
EHT
B P7
1040 EXT LS MOD
INT. LS
EXT. LS CONN.
1060 SEPERATE CONTROL MODULE
ECTION
E P12
E/W
HOR. DEFL
VEHT
VFOCUS
VG2
PROT
A P6 CONTROLS
7708 TMP87C36
μP
TRANSM
REC
OSD
IDENT
AFC
8MHz
SDA
SCL
SERVICE
CRT
CVBS STATUS
FROM B
MEM
7710 ST24C08B1
4653206I/018.XPAR 131094


A
IR RECEIVER
RECEPTEUR IR
IR EMPFAENGER
RICEVITORE RI
RECEPTOR IR
EEPROM
CPU
KEYBOARD
CLAVIER
TASTATUR
TASTIERA
TECLADO
SELECT
SERVICE
IDENT
CONTRAST
STATUS SCART 3
SECAM/PAL
PROTECT
MODE ENABLE
(RESERVED)
FRAME/TRANSM.
RECOGNITION 6)
SYS1 (POS/NEG.)
SYS2(BI/L)
NEG./POS. 3V2
L/BI 0V
PAL 0V
SECAM 4V8
SCART3
8 MHz

SEPERATE CONTROL MODULE/3A

SEPERATE MAINS MODULE/2B

RESERVED

IR RECEIVER
RECEPTEUR IR
IR EMPFAENGER
RICEVITORE RI
RECEPTOR IR

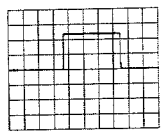
MENU

Controls
Bedienung
Commandes

TP37a = DC 2V8

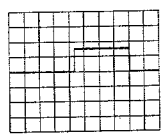
TP37b = DC 0V

TP38a
control +



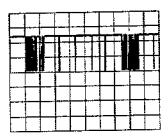
2V/div DC
0.2s div

TP38b
control -



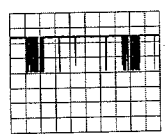
2V/div DC
0.2s div

TP39



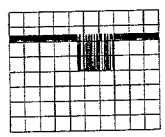
2V/div DC
20ms div

TP40



2V/div DC
20ms div

TP41
RC: volume +



2V/div DC
10ms div

REMARKS/REMARQUES/ANMERKUNGEN/NOTE

PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERäTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:
1) 25"-28" BLACK-LINE S
2) 21"-90°
3) BLACK-LINE 16/9
4) 21"-110°
5) 29"
6) RESERVED FOR DOLBY

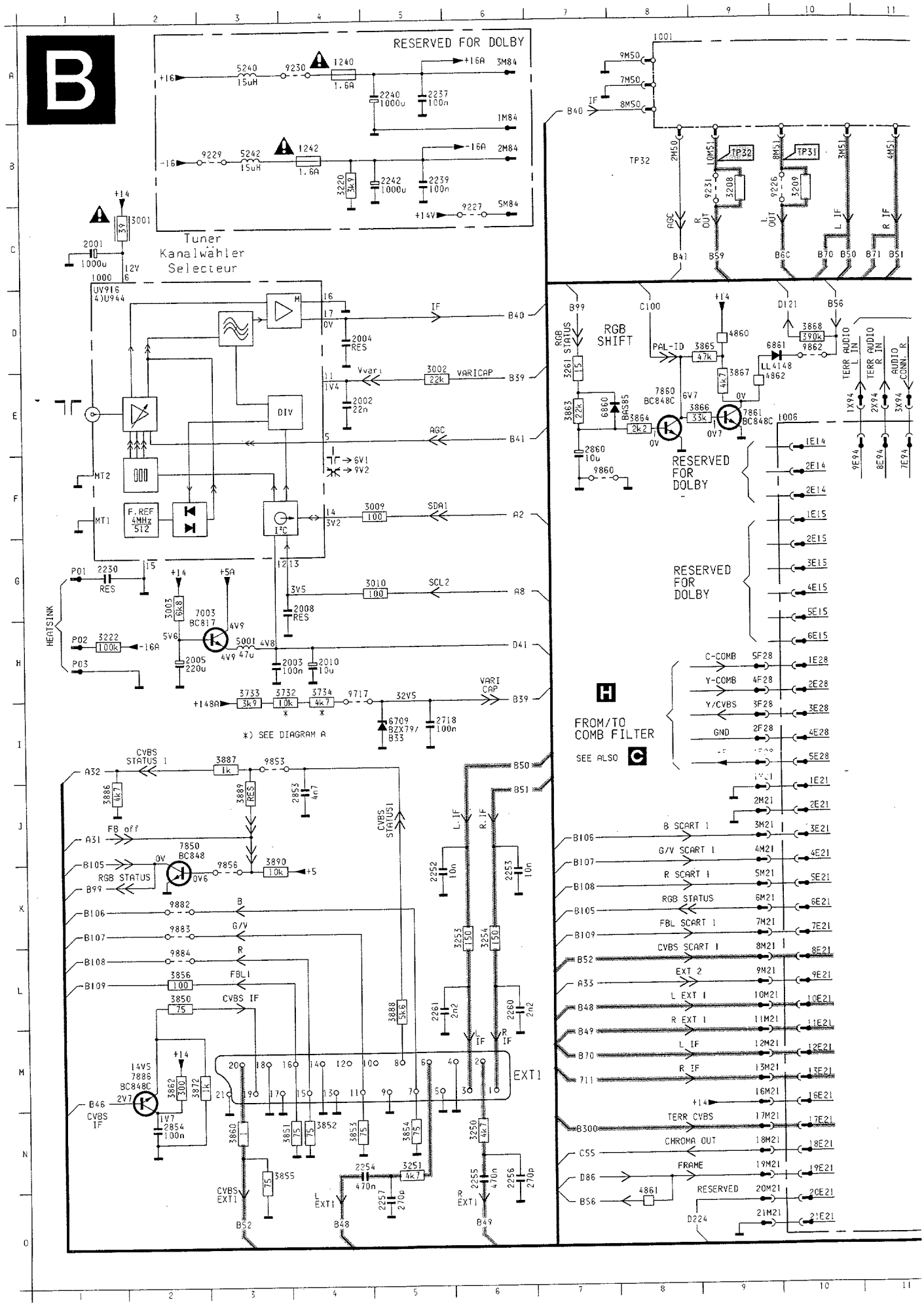
*	1)	2)	3)	4)	5)
3708	10k	22k	2k2	22k	10k
3732	10k	3k3	10k	10k	10k
3734	4k7	3k9	4k7	4k7	4k7

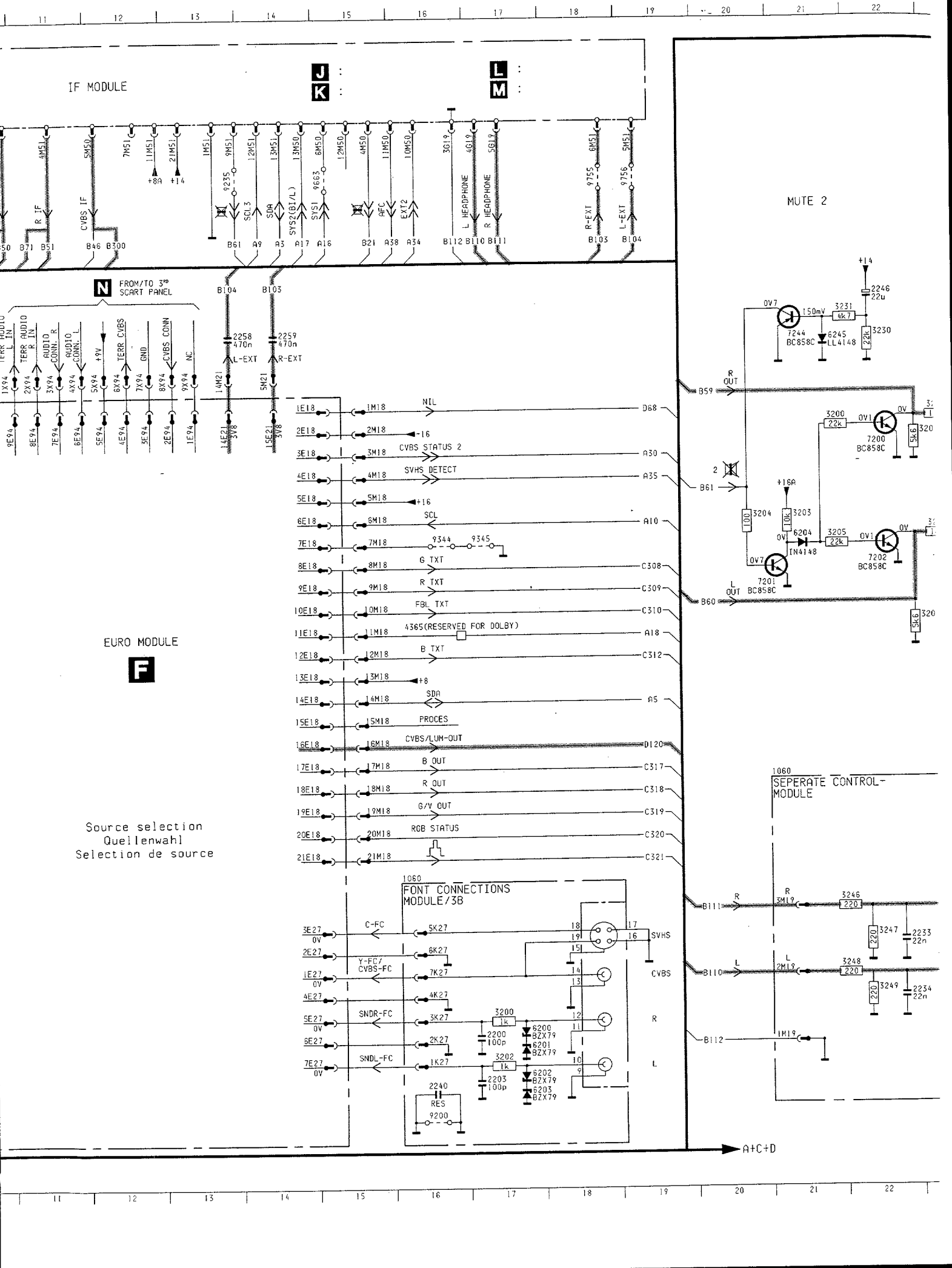
CHASSIS GR2.4

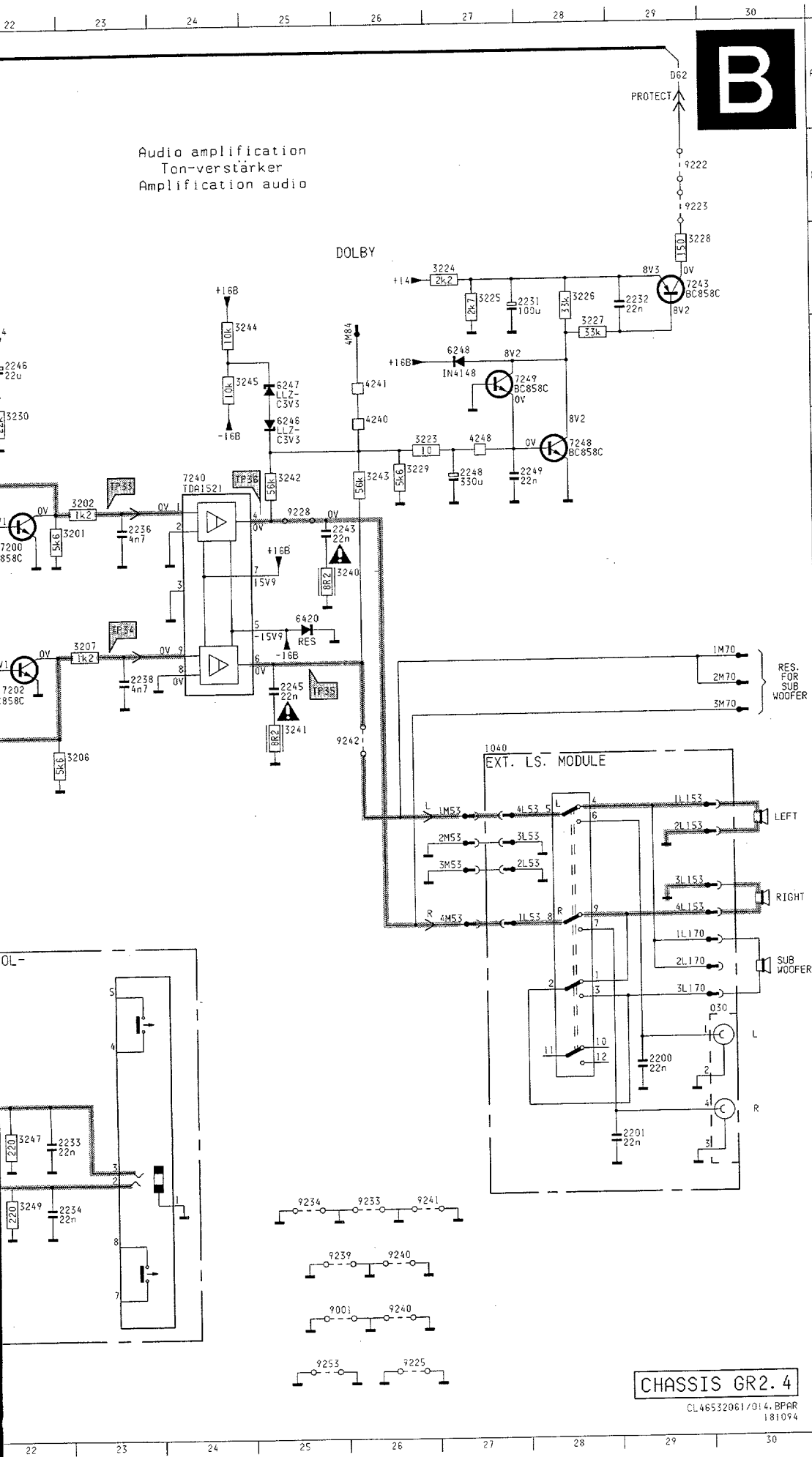
CL46532061/013.APAR
181094

1003	A 4	9714	K 3
1004	A15	9715	E 4
1060	A11	9716	D 2
1701	B13	9718	I 3
1702	B14	9749	B 2
1702	J11	9751	G14
1703	B14	9772	E 5
2700	E12	9773	I 4
2704	C14		
2704	N 2		
2705	M 7		
2706	D 5		
2707	F 6		
2708	F14		
2709	L12		
2710	L12		
2711	K12		
2712	J12		
2713	B 6		
2713	C17		
2714	D 6		
2715	D 6		
2716	A 9		
2719	J17		
2721	K14		
2722	K14		
3700	E12		
3706	H 7		
3707	N 3		
3708	F 7		
3709	G 6		
3710	L 6		
3718	I 6		
3719	J 5		
3721	I 6		
3722	J 5		
3724	I 3		
3725	J 4		
3727	N 4		
3728	E16		
3729	D16		
3729	L 4		
3730	D16		
3730	L 5		
3736	I14		
3737	J17		
3741	L14		
3742	L14		
3743	K13		
3746	F14		
3747	H17		
3748	G16		
3749	F15		
3749	F15		
3750	D 7		
3751	H17		
3752	G16		
3753	F15		
3754	I 7		
3755	D 4		
3756	C 4		
3757	C 3		
3758	C 3		
3759	G13		
3766	N12		
3767	N12		
3768	K14		
3769	N12		
3770	J13		
3771	K15		
3772	K15		
3775	B13		
3775	L 3		
3776	B14		
3776	L 2		
3779	B14		
3779	L 2		
3780	N 2		
3781	K 6		
3791	N12		
3792	N12		
3793	N12		
3794	M12		
41	M 1		
4700	D 7		
4706	B 7		
4707	N 5		
4708	B 7		
4709	B 8		
4721	E 3		
5701	L11		
5703	E 5		
6704	F14		
6705	M 6		
6707	D15		
6707	M 4		
6708	K15		
7700	G13		
7703	I 5		
7704	J 4		
7706	K13		
7707	L13		
7708	B 8		
7710	D 3		
9352	D 2		
9700	I 4		
9701	L16		
9702	I 5		
9703	G 5		
9704	J10		
9705	H17		
9706	F15		
9707	H14		
9708	G12		
9710	I14		
9711	E 2		

Tuner/Kanalwähler/Sélecteur

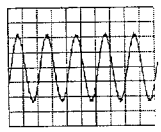



IF MODULE
J :
K :
L :
M :
MUTE 2
N FROM/TO 3rd SCART PANEL
EURO MODULE
F
Source selection
Quellenwahl
Selection de source
1060
FONT CONNECTIONS
MODULE/3B
1060
SEPERATE CONTROL-
MODULE
A+C+D



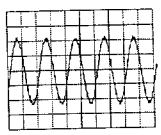
	1000	C 1	3890	K 3
	1001	A 8	4240	E26
	1006	E10	4241	D26
	1040	H27	4248	E27
A	1060	J20	4365	H *
	1060	L16	4860	D 9
	1240	A 4	4861	O 8
	1242	B 4	4862	E 9
	2001	C 1	5001	H 3
	2002	E 4	5240	A 3
	2003	H 3	5242	B 3
	2004	D 4	6200	N17
B	2005	H 2	6201	N17
	2008	G 4	6202	N17
	2010	H 4	6203	N17
	2200	L29	6204	G21
	2200	N17	6245	E21
	2201	L29	6246	E25
	2203	N17	6247	D25
	2230	G 1	6248	D27
C	2231	C28	6420	G25
	2232	C29	6709	I 5
	2233	L22	6860,	E 7
	2234	M22	6861	D10
	2236	F23	7003	G 3
	2237	A 5	7200	F22
	2238	G23	7201	H21
	2239	B 5	7202	G22
D	2240	A 5	7240	E24
	2240	N16	7243	C29
	2242	B 5	7244	D21
	2243	F25	7248	E28
	2245	G25	7249	D27
	2246	D22	7850	J 2
	2248	E27	7860	E 8
E	2249	E28	7861	E 9
	2252	K 5	7886	M 2
	2253	K 6	9001	N25
	2254	N 4	9200	O16
	2255	N 6	9222	B29
	2256	N 6	9223	B29
	2257	O 5	9225	O26
F	2258	D13	9226	B10
	2259	D14	9227	C 6
	2260	L 6	9228	F25
	2261	L 5	9229	B 3
	2718	I 5	9230	A 4
	2853	J 4	9231	B 9
	2854	N 2	9233	M26
	2860	F 7	9234	M25
G	3001	C 2	9235	B13
	3002	E 5	9239	N25
	3003	G 2	9240	N26
	3009	F 5	9240	N26
	3010	G 5	9241	M26
	3200	F21	9242	H26
	3200	M17	9253	O25
	3201	F23	9344	G16
H	3202	E23	9345	G17
	3202	N17	9663	B15
	3203	G21	9717	H 4
	3204	G20	9755	B18
	3205	G21	9756	B19
	3206	H23	9853	I 3
	3207	G23	9856	K 3
I	3208	B 9	9860	F 7
	3209	B10	9862	D10
	3220	B 4	9882	K 2
	3222	H 1	9883	K 2
	3223	E26	9884	L 2
	3224	C27		
	3225	C27		
	3226	C28		
	3227	D28		
J	3228	C29		
	3229	E26		
	3230	D22		
	3231	D22		
	3240	F25		
	3241	H25		
K	3242	E25		
	3243	E26		
	3244	C24		
	3245	D24		
	3246	L22		
	3247	L22		
	3248	M22		
	3249	M22		
L	3250	N 6		
	3251	N 5		
	3253	K 6		
	3254	K 6		
	3261	E 7		
	3732	H 3		
	3733	H 3		
M	3734	H 4		
	3850	L 2		
	3851	N 3		
	3852	N 4		
	3853	N 4		
	3854	N 5		
	3855	N 3		
	3856	L 2		
N	3860	N 3		
	3862	M 2		
	3863	E 7		
	3864	E 8		
	3865	D 9		
	3866	E 9		
	3867	E 9		
	3868	D10		
O	3872	M 2		
	3886	J 1		
	3887	I 3		
	3888	L 5		
	3889	J 3		

* TP31



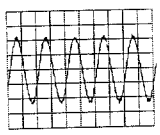
10mV/div AC
0.5ms div

* TP32



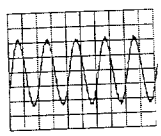
10mV/div AC
0.5ms div

* TP33



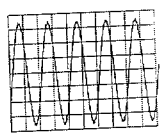
10mV/div AC
0.5ms div

* TP34



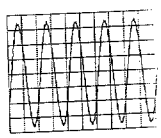
10mV/div AC
0.5ms div

* TP35



200mV/div AC
0.5ms div

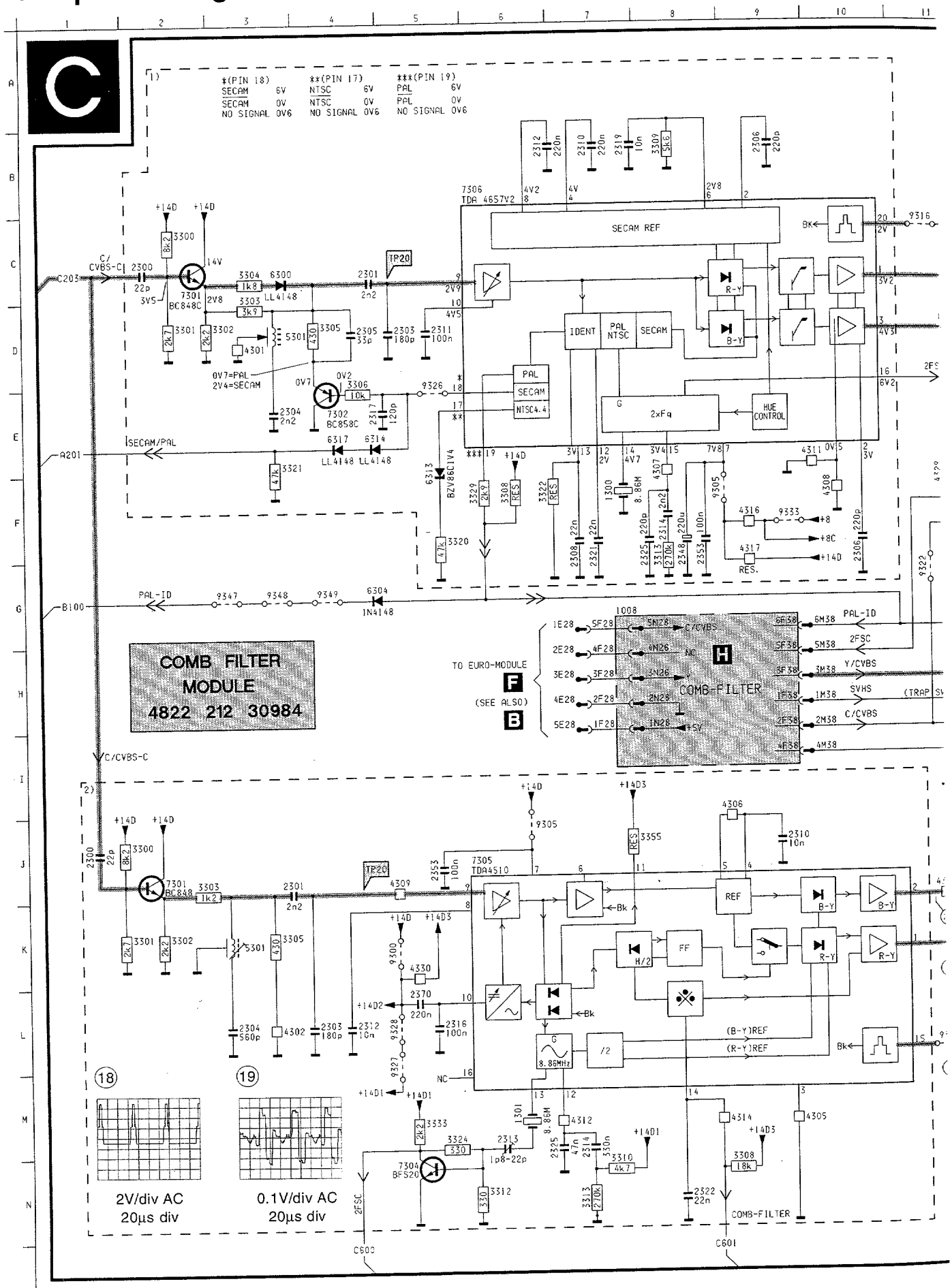
* TP36



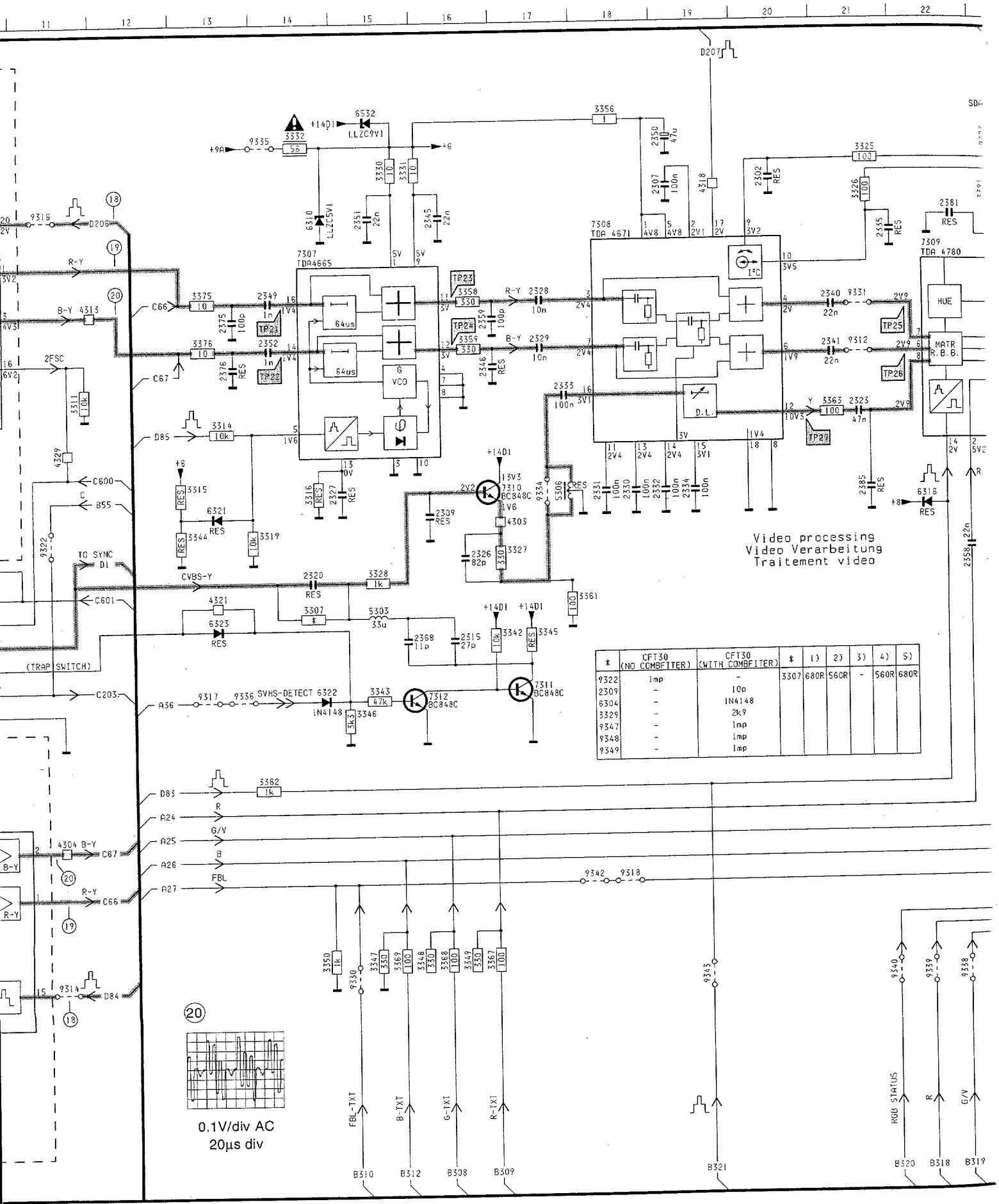
200mV/div AC
0.5ms div

* measured at ◿ = 50%

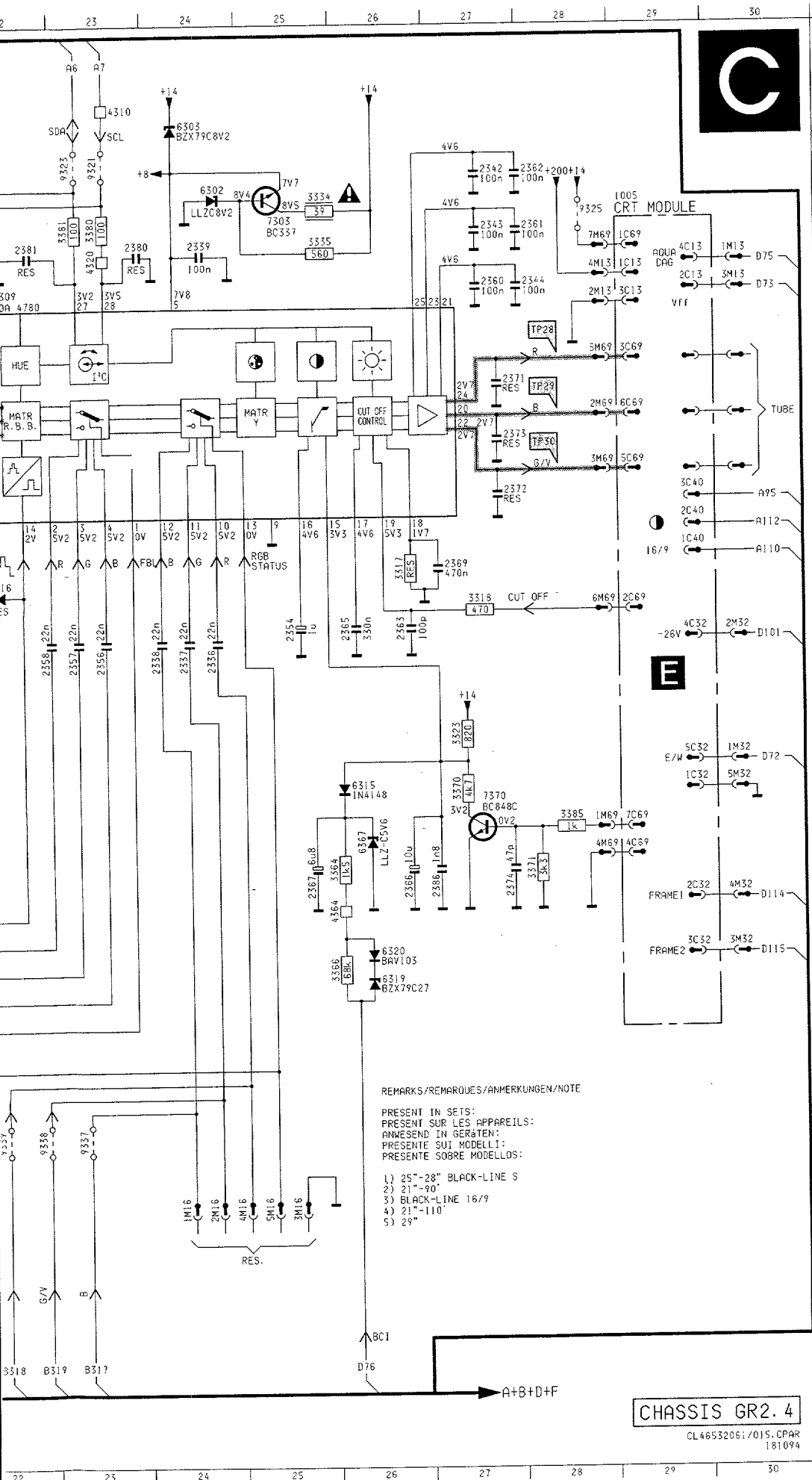
Video processing/Video Verarbeitung/



Traitement video



*	CFT30 (NO COMBFITER)	CFT30 (WITH COMBFITER)	*	1)	2)	3)	4)	5)
9322	Imp	-	3307	680R	560R	-	560R	680R
2309	-	10p						
6304	-	IN4148						
3329	-	2k9						
9347	-	Imp						
9348	-	Imp						
9349	-	Imp						



1005	B29	3319	G14	9328	L 5
1008	G 7	3320	F 5	9330	L15
1300	F 7	3321	E 3	9331	D21
1301	M 6	3322	F 6	9333	F 9
2300	C 2	3323	H27	9334	F17
2300	J 1	3324	M 5	9335	B14
2301	C 4	3325	B21	9336	I13
2301	J 3	3326	B21	9337	L23
2302	B20	3327	G17	9338	L22
2303	D 5	3328	G15	9339	L22
2303	L 4	3329	F 6	9340	L21
2304	E 3	3330	B15	9342	K18
2304	L 3	3331	B15	9343	L19
2305	D 4	3332	B14	9347	G 3
2306	B 9	3333	M 5	9348	G 3
2306	F10	3334	B25	9349	G 4
2307	B19	3335	C25		
2308	F 7	3342	H17		
2309	F16	3343	I15		
2310	B 7	3344	G13		
2310	J 9	3345	H17		
2311	D 5	3346	I15		
2312	B 6	3347	L15		
2312	L 4	3348	L16		
2313	M 6	3349	L16		
2314	F 8	3350	L14		
2314	M 7	3355	J 7		
2315	H16	3356	A18		
2316	L 5	3358	D16		
2317	E 4	3359	D16		
2319	B 7	3361	G18		
2320	G14	3362	J14		
2321	F 7	3363	E21		
2322	N 8	3364	I26		
2323	E21	3366	J26		
2325	F 8	3367	L16		
2325	M 6	3368	L16		
2326	G16	3369	L15		
2327	F15	3370	H27		
2328	D17	3371	I28		
2329	D17	3375	D13		
2330	F18	3376	D13		
2331	F18	3380	B23		
2332	F19	3381	B23		
2333	E17	3385	I28		
2334	F19	4301	D 3		
2335	C21	4302	L 3		
2336	G24	4303	F17		
2337	G24	4304	J11		
2338	G24	4305	M 9		
2339	C24	4306	I 9		
2340	D21	4307	F 8		
2341	D21	4308	F10		
2342	B27	4309	J 5		
2343	B27	4310	A23		
2344	C28	4311	E10		
2345	C16	4312	M 7		
2346	E16	4313	D11		
2348	F 8	4314	M 8		
2349	D14	4316	F 9		
2350	B19	4317	F 9		
2351	C15	4318	B19		
2352	D14	4320	C23		
2353	F 8	4321	G13		
2353	J 5	4329	F11		
2354	G25	4330	K 5		
2356	G23	4364	J26		
2357	G23	5301	D 3		
2358	G22	5301	K 3		
2359	D16	5303	H15		
2360	C27	5306	F17		
2361	B28	6300	C 3		
2362	B28	6302	B24		
2363	G26	6303	A24		
2365	G26	6304	G 4		
2366	I26	6310	C14		
2367	I25	6313	F 5		
2368	H15	6314	E 4		
2369	F27	6315	H26		
2370	L 5	6316	F22		
2371	D27	6317	E 4		
2372	E27	6319	J26		
2373	E27	6320	J26		
2374	I27	6321	F13		
2375	D13	6322	I14		
2376	E13	6323	H13		
2380	C23	6367	I26		
2381	C22	6532	A15		
2385	F21	7301	C 2		
2386	I27	7301	J 2		
3300	C 2	7302	E 4		
3300	J 2	7303	B25		
3301	D 2	7304	N 5		
3301	K 2	7305	J 5		
3302	D 3	7306	B 5		
3302	K 2	7307	C14		
3303	D 3	7308	C18		
3303	J 2	7309	C22		
3304	C 3	7310	F17		
3305	D 4	7311	I17		
3305	K 3	7312	I16		
3306	E 4	7370	I27		
3307	H14	9300	K 5		
3308	F 6	9305	F 8		
3308	N 9	9305	J 6		
3309	B 8	9312	D21		
3310	N 7	9314	L11		
3311	E11	9316	C11		
3312	N 6	9317	I13		
3313	G 8	9318	K18		
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3314	E13	9322	G11		
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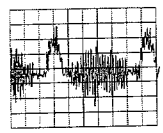
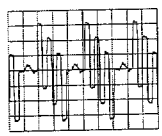
TP20



20mV/div AC
10µs div

TP26

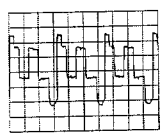


0.2V/div AC
20µs div

TP27

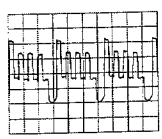
0.1V/div AC
20µs div

TP28



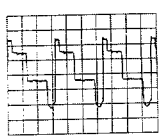
0.5V/div AC
20µs div

TP29



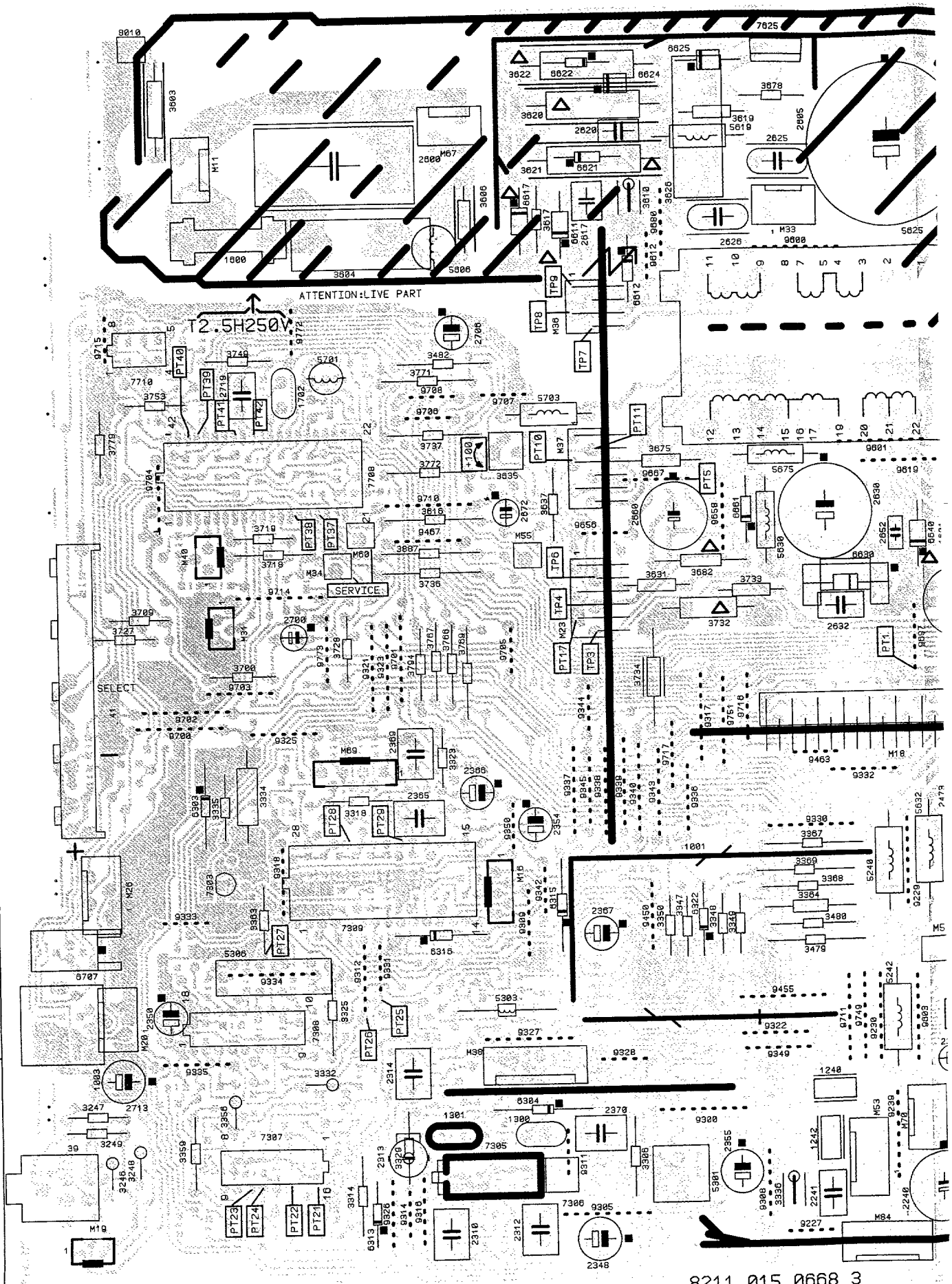
0.5V/div AC
20µs div

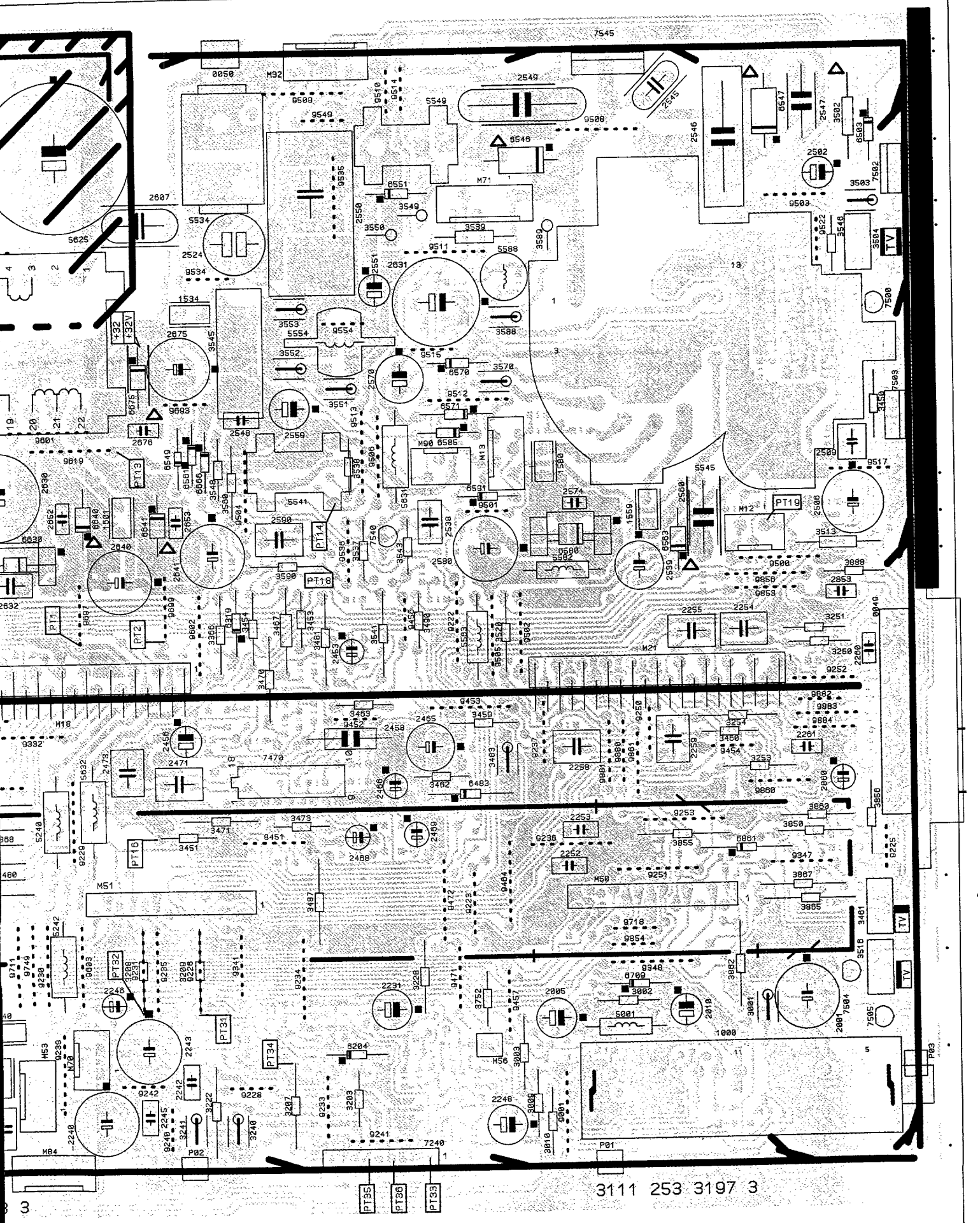
TP30



0.5V/div AC
20µs div

Mono carrier / Hauptplatine / Châssis





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1003 G4	3332 F5	5619 E1	9349 E5
1240 D5	3334 G4	5625 D2	9350 F4
1242 D5	3335 G4	5630 E3	9450 E4
1300 F5	3336 E5	5631 C2	9451 C4
1301 F5	3347 E4	5632 D4	9452 C3
1534 D2	3348 E4	5675 E2	9453 B3
1559 B3	3349 E4	5701 F2	9454 A4
1580 B2	3350 E4	5703 E2	9455 E4
1600 G1	3356 G5	6204 C5	9456 C3
1601 D3	3359 G5	6303 G4	9457 B5
1702 G2	3363 G4	6304 F5	9463 D3
2001 A5	3364 D4	6313 F5	9464 B4
2005 B5	3366 C3	6315 E4	9467 F3
2010 B5	3367 D4	6316 F4	9471 C5
2231 C5	3368 E4	6319 C3	9472 C4
2240 D5	3369 E4	6322 E4	9500 A3
2241 D5	3450 A2	6483 B4	9501 B3
2242 D5	3451 D4	6503 A1	9502 B3
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2245 D5	3454 C3	6547 A1	9504 C2
2246 D5	3459 B3	6549 D2	9505 B3
2248 B5	3460 A3	6551 C1	9506 C2
2252 B4	3461 A4	6561 D2	9508 B1
2253 B4	3462 C4	6563 B3	9509 C1
2254 A3	3463 C3	6570 B2	9510 C1
2255 B3	3467 C3	6571 B2	9511 C1
2258 B4	3470 C3	6580 B3	9512 B2
2259 B4	3471 C4	6585 C2	9513 C2
2260 A3	3473 C4	6591 B2	9514 C1
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2310 F5	3480 D4	6612 E2	9517 A2
2312 F5	3481 C3	6617 F1	9522 A1
2313 F5	3482 F2	6621 E1	9534 D2
2314 F5	3483 B4	6622 E1	9535 C1
2348 E5	3487 C4	6624 E1	9536 C3
2350 G4	3490 C3	6625 E1	9549 C1
2354 F4	3502 A1	6630 D3	9554 C2
2355 E5	3503 A1	6640 D3	9600 E1
2365 F4	3504 A1	6641 D3	9601 D2
2366 F4	3513 A3	6661 E2	9602 D3
2367 E4	3516 A4	6666 D2	9603 D4
2369 F3	3520 B3	6675 D2	9612 E1
2370 E5	3537 C3	6707 G4	9619 D2
2453 C3	3538 C2	6709 B5	9656 E3
2456 D4	3539 B1	6861 A4	9658 E2
2458 C4	3541 C3	7240 C5	9667 E2
2465 C4	3543 C3	7303 G4	9680 E1
2466 C4	3545 C2	7305 F5	9693 D2
2468 C4	3546 A1	7306 F5	9697 D3
2469 C4	3548 C2	7307 F5	9699 D3
2471 D4	3549 C1	7308 G5	9700 G3
2473 D4	3550 C1	7309 F4	9701 F3
2502 A1	3551 C2	7470 C4	9702 G3
2506 A3	3552 C2	7500 A2	9703 G3
2509 A2	3553 C2	7502 A1	9704 G2
2524 C1	3560 C2	7503 A2	9705 F3
2538 C3	3570 B2	7504 A5	9706 F2
2539 B3	3588 B2	7505 A5	9707 F2
2545 B1	3589 B1	7540 C3	9708 F2
2546 A1	3590 C3	7545 B1	9710 F2
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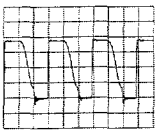
2548 C2	3604 F1	7708 G2	9714 G3
2549 B1	3606 F1	7710 G2	9715 G2
2550 C1	3610 E1	8010 G1	9716 E3
2551 C2	3616 F2	9001 B5	9717 E3
2559 C2	3617 F1	9222 C3	9718 B4
2560 A3	3619 E1	9223 B4	9749 D4
2570 C2	3620 E1	9225 A4	9751 E3
2574 B3	3621 E1	9226 D4	9772 F2
2580 B3	3622 E1	9227 E5	9773 F3
2590 C3	3626 E1	9228 C5	9853 A3
2600 F1	3631 E3	9229 D4	9854 B4
2605 D1	3635 F2	9230 D4	9856 A3
2607 D1	3637 E2	9231 D4	9860 A4
2617 E1	3675 E2	9233 C5	9861 B4
2620 E1	3678 E1	9234 C5	9880 B4
2625 E1	3682 E3	9235 D4	9881 B4
2626 E1	3700 G3	9236 B4	9882 A3
2630 D3	3709 G3	9237 B3	9883 A3
2631 C2	3718 G3	9239 D5	9884 A3
2632 D3	3719 G3	9240 D5	M11 G1
2640 D3	3727 G3	9241 C5	M12 A3
2641 D3	3728 F3	9242 D5	M13 B2
2652 D3	3732 E3	9250 B3	M16 F4
2653 D3	3733 E3	9251 B4	M18 D3
2660 E3	3734 E3	9252 A3	M19 G5
2672 F2	3736 F3	9253 B4	M20 G4
2675 D2	3737 F2	9300 E5	M21 B3
2676 D2	3749 G2	9305 E5	M23 E3
2700 F3	3752 B5	9308 E5	M26 G4
2706 F2	3753 G2	9309 F4	M31 G3
2713 G5	3766 F3	9311 E5	M32 C1
2719 G2	3767 F3	9312 F4	M33 E1
2853 A3	3769 F3	9314 F5	M34 F3
2860 A4	3771 F2	9316 F5	M36 E2
3001 A5	3772 F2	9317 E3	M37 E2
3002 B5	3779 G2	9318 G4	M38 E5
3003 B5	3794 F3	9321 F3	M40 G3
3009 B5	3850 A4	9322 E4	M50 B4
3010 B5	3855 B4	9323 F3	M51 D4
3203 C5	3856 A4	9325 G3	M53 D5
3207 C5	3860 A4	9326 F5	M55 F3
3208 D4	3862 A4	9327 F4	M56 B5
3209 D4	3865 A4	9328 E5	M60 F3
3222 D5	3867 A4	9330 D4	M67 F1
3228 C4	3887 F3	9331 F4	M69 F3
3240 C5	3888 A3	9332 D3	M70 D5
3241 D5	5001 B5	9333 G4	M71 B1
3246 G5	5240 D4	9334 G4	M84 D5
3247 G5	5242 D4	9335 G5	M90 C2
3248 G5	5301 E5	9336 E4	P01 B5
3249 G5	5303 F4	9337 E4	P02 D5
3250 A3	5306 G4	9338 E4	P03 A5
3251 A3	5534 D1	9339 E4	
3253 A4	5541 C2	9340 E4	
3254 A3	5545 B2	9341 C4	
3306 E5	5549 C1	9342 F4	
3314 F5	5554 C2	9343 E4	
3318 F4	5563 B3	9344 E3	

TP1 = DC 15V9

TP2 = DC -15V9

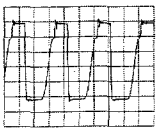
TP3



20V/div AC
5µs div

TP4 = DC 9V7

TP5

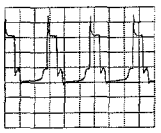


5V/div AC
5µs div

TP6 = DC 4V8

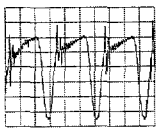
TP7 = DC 298V

TP8



2V/div AC
5µs div

TP9



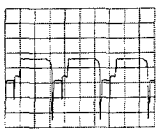
0.2V/div AC
5µs div

TP10 = DC 2V4

TP11 = DC 0V

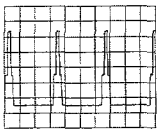
TP12 = DC 2V7

TP14



2V/div AC
20µs div

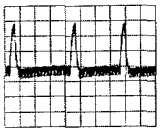
TP16



2V/div AC
20µs div

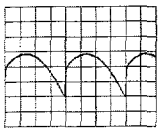
TP17 = DC 0V

TP18



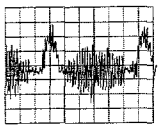
2V/div AC
5ms div

TP19



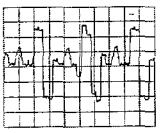
1V/div AC
5ms div

TP20



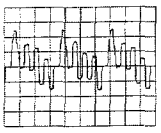
20mV/div AC
10µs div

TP21



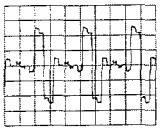
0.1V/div AC
20µs div

TP22



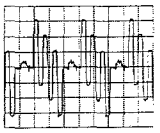
0.2V/div AC
20µs div

TP23



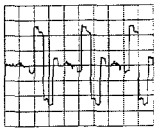
0.2V/div AC
20µs div

TP24



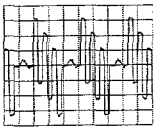
0.2V/div AC
20µs div

TP25



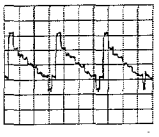
0.2V/div AC
20µs div

TP26



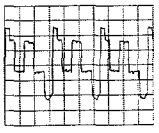
0.2V/div AC
20µs div

TP27



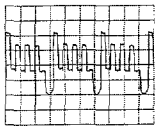
0.1V/div AC
20µs div

TP28



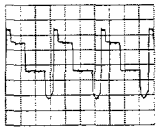
0.5V/div AC
20µs div

TP29



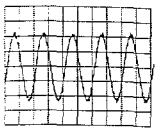
0.5V/div AC
20µs div

TP30



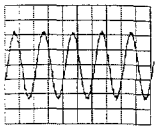
0.5V/div AC
20µs div

TP31



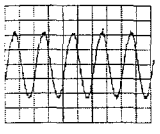
10mV/div AC
0.5ms div

TP32



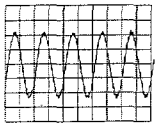
10mV/div AC
0.5ms div

TP33



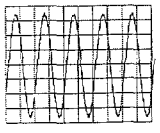
10mV/div AC
0.5ms div

TP34



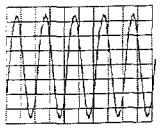
10mV/div AC
0.5ms div

TP35



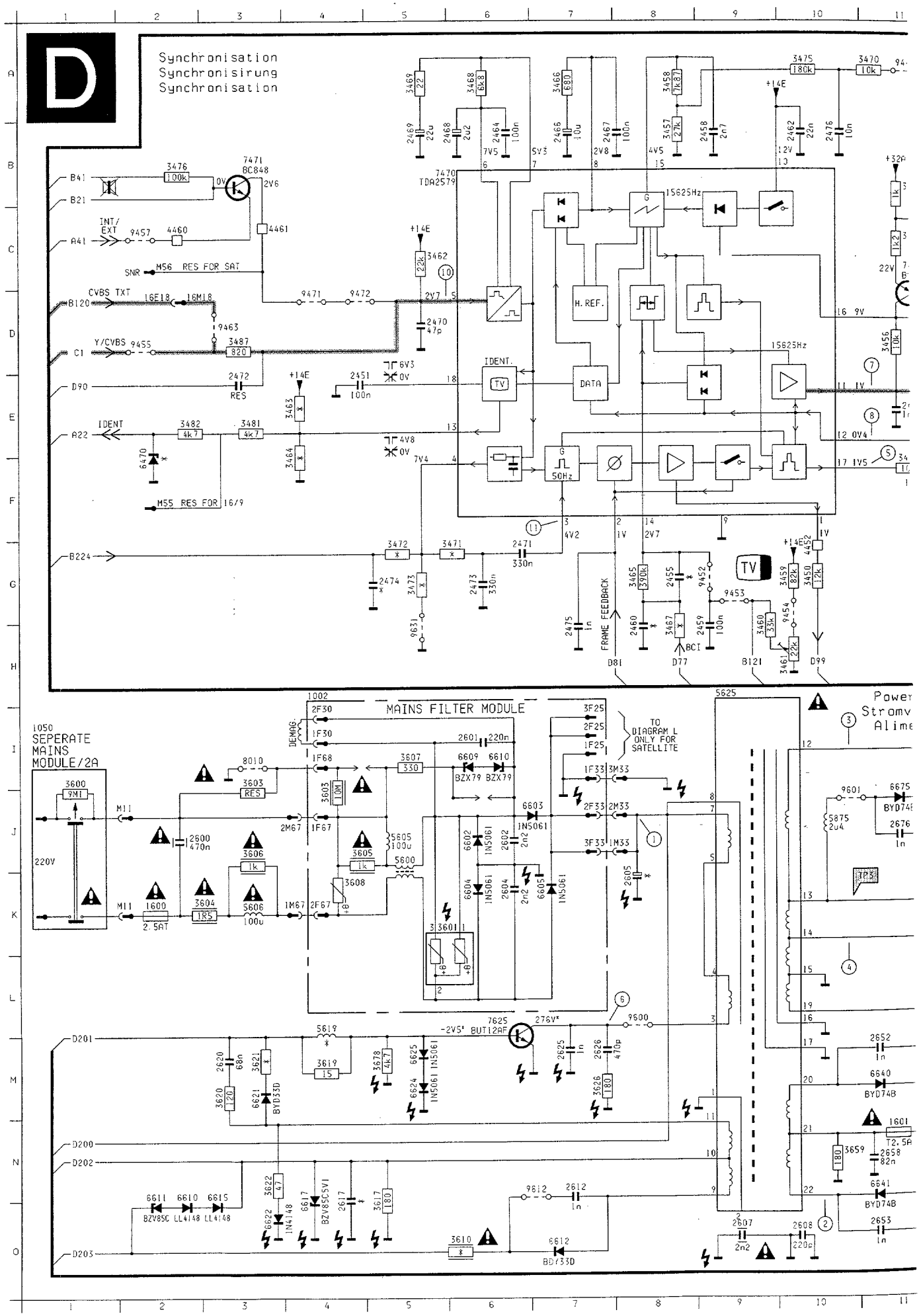
200mV/div AC
0.5ms div

TP36

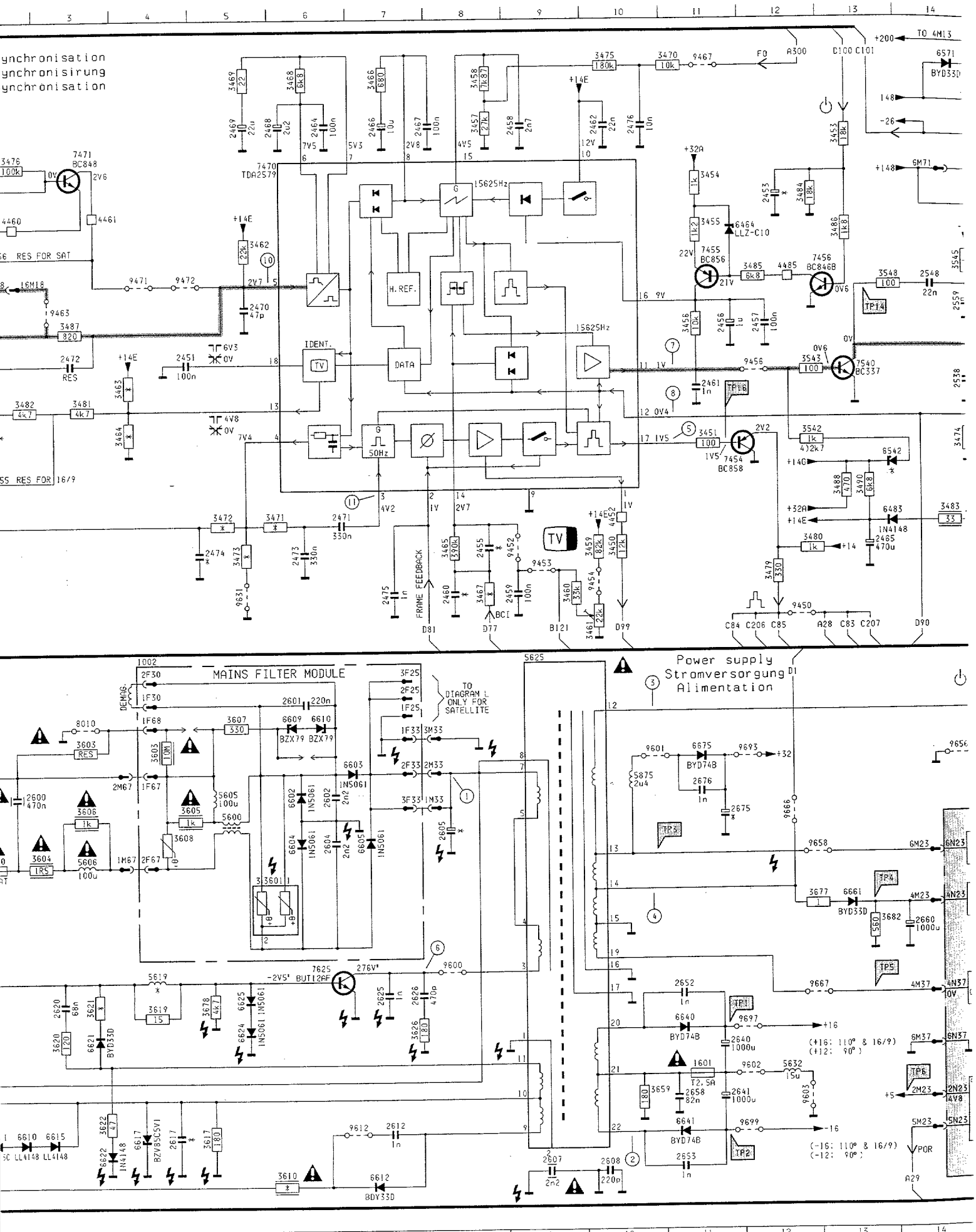


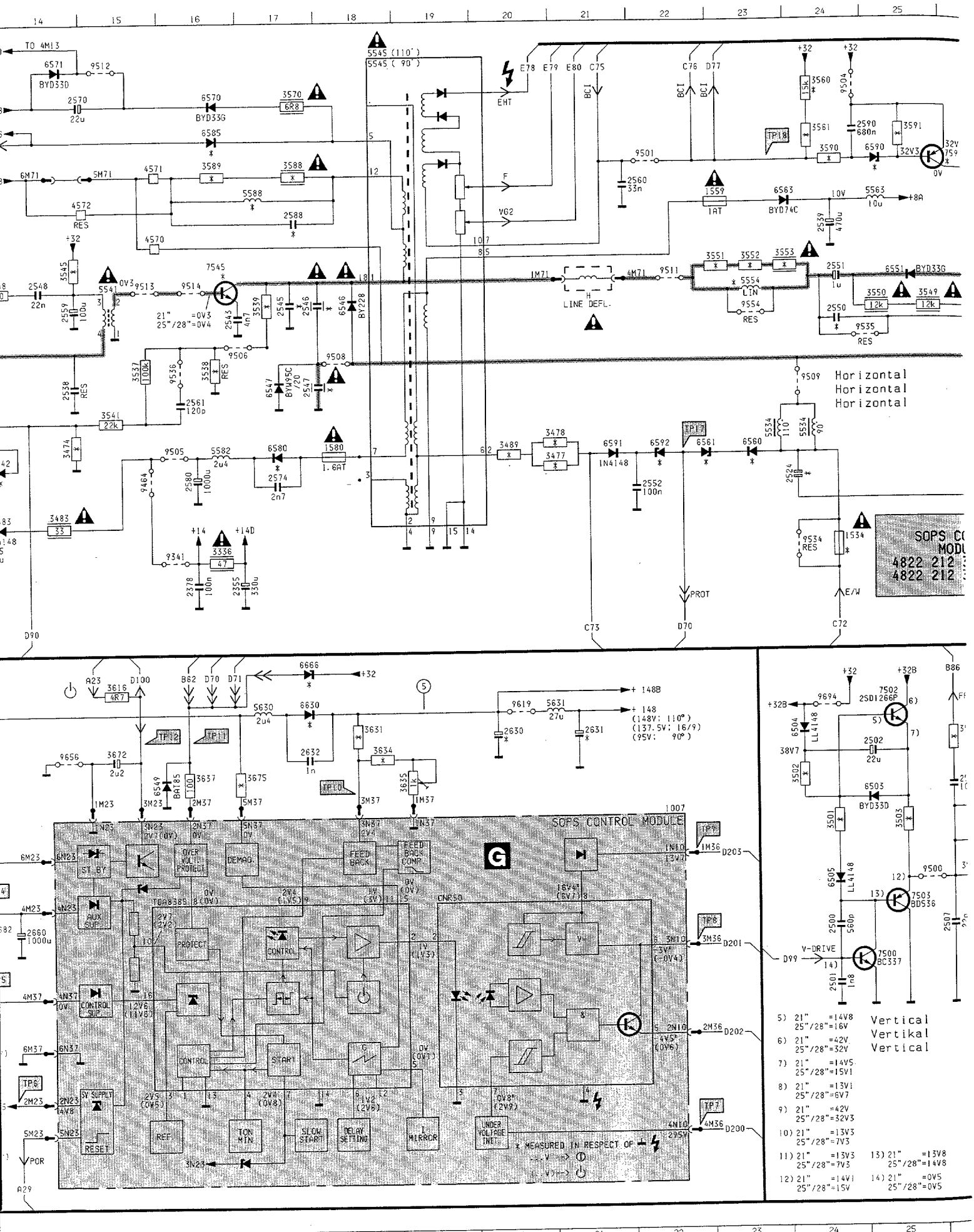
200mV/div AC
0.5ms div

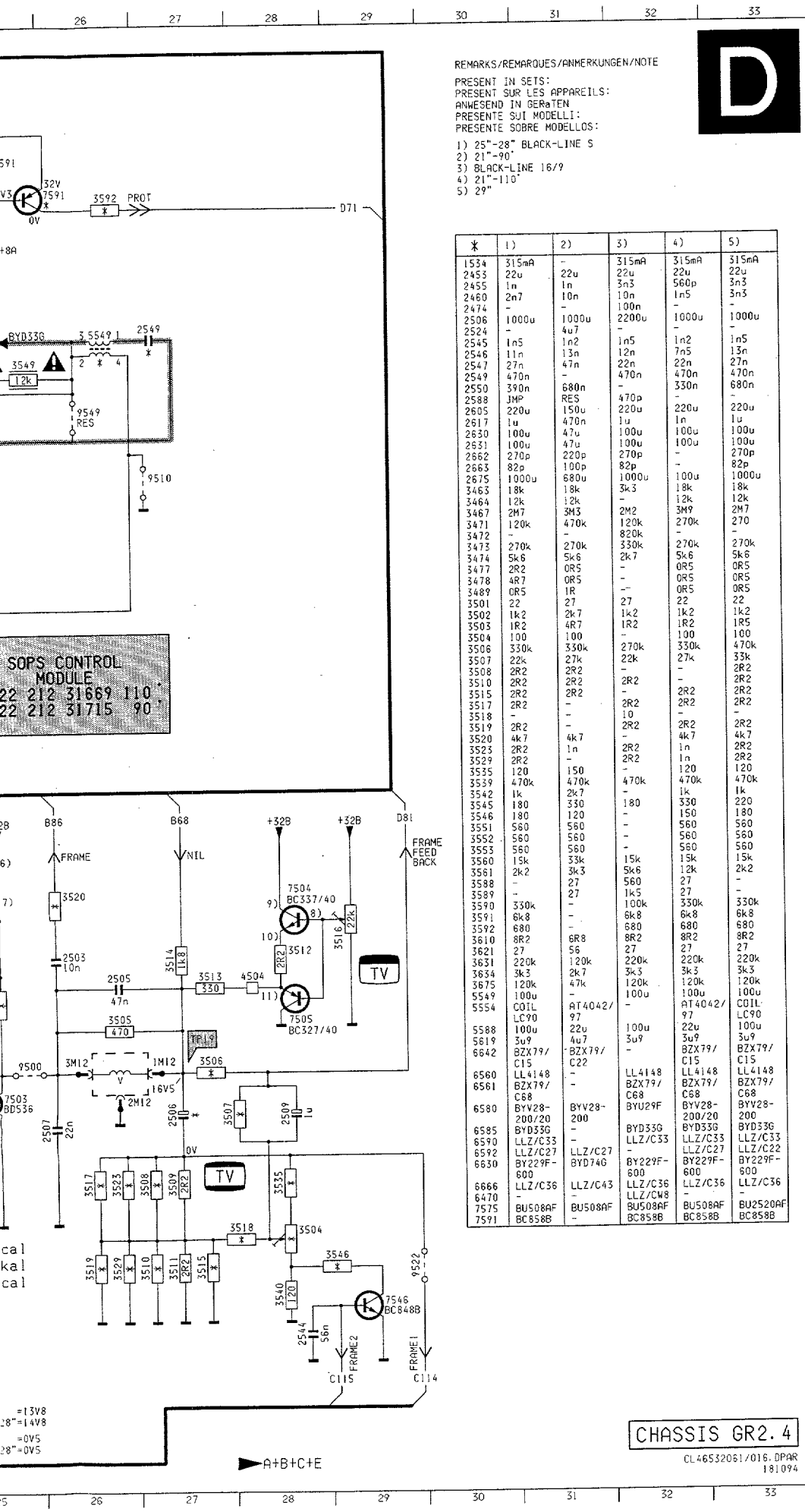
Power supply/Stromversorgung/Alimentation



Power supply/Stromversorgung/Alimentation




Horizontal
Horizontal
Horizontal
SOPS CONTROL MODULE
Vertical
Vertikal
Vertical



REMARKS/REMARQUES/ANMERKUNGEN/NOTE

PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERäTEN
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:

1) 25"-28" BLACK-LINE S
2) 21"-90°
3) BLACK-LINE 16/9
4) 21"-110°
5) 29"

*	1)	2)	3)	4)	5)
1534	315mA	-	315mA	315mA	315mA
2453	22u	22u	22u	22u	22u
2455	1n	1n	3n3	560p	3n3
2460	2n7	10n	10n	1n5	3n3
2474	-	-	100n	-	-
2506	1000u	1000u	2200u	1000u	1000u
2524	-	4u7	-	-	-
2545	1n5	1n2	1n5	1n2	1n5
2546	11n	13n	12n	7n5	13n
2547	27n	47n	22n	22n	27n
2549	470n	-	470n	470n	470n
2550	390n	680n	-	330n	680n
2588	JMP	RES	470p	-	-
2605	220u	150u	220u	220u	220u
2617	1u	470n	1u	1n	1u
2630	100u	47u	100u	100u	100u
2631	100u	47u	100u	100u	100u
2662	270p	220p	270p	-	270p
2663	82p	100p	82p	-	82p
2675	1000u	680u	1000u	100u	1000u
3463	18k	18k	3k3	18k	18k
3464	12k	12k	-	12k	12k
3467	2M7	3M3	2M2	3M9	2M7
3471	120k	470k	120k	270k	270
3472	-	-	820k	-	-
3473	270k	270k	330k	270k	270k
3474	5k6	5k6	2k7	5k6	5k6
3477	2R2	0R5	-	0R5	0R5
3478	4R7	0R5	-	0R5	0R5
3489	0R5	1R	-	0R5	0R5
3501	22	27	27	22	22
3502	1k2	2k7	1k2	1k2	1k2
3503	1R2	4R7	1R2	1R2	1R5
3504	100	100	-	100	100
3506	330k	330k	270k	330k	470k
3507	22k	27k	22k	27k	33k
3508	2R2	2R2	-	-	2R2
3510	2R2	2R2	2R2	-	2R2
3515	2R2	2R2	-	2R2	2R2
3517	2R2	-	2R2	2R2	2R2
3518	-	-	10	-	-
3519	2R2	-	2R2	2R2	2R2
3520	4k7	4k7	-	4k7	4k7
3523	2R2	1n	2R2	1n	2R2
3529	2R2	-	2R2	1n	2R2
3535	120	150	-	120	120
3539	470k	470k	470k	470k	470k
3542	1k	2k7	-	1k	1k
3545	180	330	180	330	220
3546	180	120	-	150	180
3551	560	560	-	560	560
3552	560	560	-	560	560
3553	560	560	-	560	560
3560	15k	33k	15k	15k	15k
3561	2k2	3k3	5k6	12k	2k2
3588	-	27	560	27	-
3589	-	27	1k5	27	-
3590	330k	-	100k	330k	330k
3591	6k8	-	6k8	6k8	6k8
3592	680	-	680	680	680
3610	8R2	6R8	8R2	8R2	8R2
3621	27	56	27	27	27
3631	220k	120k	220k	220k	220k
3634	3k3	2k7	3k3	3k3	3k3
3675	120k	47k	120k	120k	120k
5549	100u	-	100u	100u	100u
5554	COIL	AT4042/ 97	-	AT4042/ 97	COIL LC90
5588	100u	22u	100u	22u	100u
5619	3u9	4u7	3u9	3u9	3u9
6642	BZX79/ C15	BZX79/ C22	-	BZX79/ C15	BZX79/ C15
6560	LL4148	-	LL4148	LL4148	LL4148
6561	BZX79/ C68	-	BZX79/ C68	BZX79/ C68	BZX79/ C68
6580	BYV28-200/20	BYV28-200	BYU29F	BYV28-200/20	BYV28-200
6585	BYD33G	-	BYD33G	BYD33G	BYD33G
6590	LLZ/C33	-	LLZ/C33	LLZ/C33	LLZ/C33
6592	LLZ/C27	LLZ/C27	-	LLZ/C27	LLZ/C22
6630	BY229F-600	BYD74G	BY229F-600	BY229F-600	BY229F-600
6666	LLZ/C36	LLZ/C43	LLZ/C36	LLZ/C36	LLZ/C36
6470	-	-	LLZ/C48	-	-
7575	BU508AF	BU508AF	BU508AF	BU508AF	BU2520AF
7591	BC858B	-	BC858B	BC858B	BC858B

	1002	H 4	3481	E 3	6542 F13
	1007	J22	3482	E 2	6546 D18
	1050	I 1	3483	G14	6547 E17
	1534	G24	3484	C12	6549 J15
A	1559	C23	3485	C12	6551 D25
	1580	F18	3486	C13	6560 F23
	1600	K 2	3487	D 3	6561 F22
	1601	N11	3488	F13	6563 C24
	2355	G16	3489	F20	6570 A16
	2378	G16	3490	F13	6571 A14
	2451	E 4	3501	K24	6580 F17
	2453	C12	3502	J24	6585 B16
B	2455	G 8	3503	K25	6590 B25
	2456	D11	3504	M28	6591 F21
	2457	D12	3505	K26	6592 F22
	2458	B 9	3506	K27	6602 J 6
	2459	H 9	3507	L27	6603 J 7
	2460	H 8	3508	L27	6604 K 6
	2461	E11	3509	L27	6605 K 7
	2462	B10	3510	M27	6610 N 2
C	2464	B 6	3511	M27	6611 N 2
	2465	G13	3512	J28	6612 O 7
	2466	B 7	3513	J27	6615 N 3
	2467	B 7	3514	J27	6617 N 4
	2468	B 6	3515	M27	6621 M 3
	2469	B 5	3516	J29	6622 O 3
	2470	D 5	3517	L26	6624 M 5
D	2471	G 6	3518	M28	6625 M 5
	2472	E 3	3519	M26	6630 I17
	2473	G 6	3520	I26	6640 M11
	2474	G 5	3523	L26	6641 N11
	2475	H 7	3529	M26	6661 K13
	2476	B10	3535	L28	6666 H17
	2500	L24	3537	E15	6675 J11
	2501	M24	3538	E16	7454 F12
E	2502	J25	3539	D17	7455 C11
	2503	J26	3540	N28	7456 C13
	2505	J26	3541	E15	7470 B 6
	2506	L27	3542	F12	7471 B 3
	2507	L26	3543	E12	7500 L25
	2509	L28	3545	C14	7502 I25
	2524	F24	3546	M29	7503 L25
F	2538	E14	3548	D13	7504 I28
	2539	C24	3549	D25	7505 K28
	2543	D16	3550	D25	7540 E13
	2544	N28	3551	C23	7545 C16
	2545	D17	3552	C23	7546 N29
	2546	D17	3553	C24	7591 B26
	2547	E17	3560	A24	7625 L 6
	2548	D14	3561	B24	8010 I 3
G	2549	D27	3570	A17	9341 G16
	2550	D24	3588	B17	9450 H12
	2551	D24	3589	B16	9452 G 9
	2552	F22	3590	B24	9453 G 9
	2559	D14	3591	B25	9454 G10
	2560	B22	3592	B26	9455 D 2
	2561	E16	3600	I 1	9456 E12
	2570	A14	3601	K 5	9457 C 2
H	2574	F17	3603	I 3	9463 D 3
	2580	F16	3603	J 4	9464 F15
	2588	C17	3604	K 3	9467 A11
	2590	B24	3605	J 4	9471 D 4
	2600	J 2	3606	J 3	9472 D 4
	2601	I 6	3607	I 5	9500 K25
	2602	J 6	3608	K 4	9501 B22
I	2604	K 6	3610	O 6	9504 A24
	2605	K 8	3616	I15	9505 F16
	2607	O 9	3617	N 5	9506 D17
	2608	O10	3619	M 4	9508 E18
	2612	N 7	3620	M 3	9509 E24
	2617	N 4	3621	M 3	9510 E27
	2620	M 3	3622	N 3	9511 D22
	2625	M 7	3626	M 7	9512 A15
J	2626	M 7	3631	I18	9513 D15
	2630	I20	3634	J18	9514 D16
	2631	I21	3635	J19	9522 M29
	2632	J17	3637	J16	9534 G24
	2640	M11	3659	N10	9535 D25
	2641	N11	3672	J15	9536 E16
	2652	M11	3675	J17	9549 D26
K	2653	O11	3677	K12	9554 D23
	2658	N11	3678	M 5	9600 L 8
	2660	L14	3682	L13	9601 J10
	2675	J11	4452	G10	9602 N12
	2676	J11	4460	C 2	9603 N12
	3336	G16	4461	C 3	9612 N 7
	3450	G10	4485	C12	9619 I20
	3451	F11	4504	J28	9631 H 5
L	3453	B13	4570	C15	9656 J14
	3454	B11	4571	B15	9658 K12
	3455	C11	4572	C15	9666 J12
	3456	D11	5534	E23	9667 M12
	3457	B 8	5534	E24	9693 J12
	3458	A 8	5541	D15	9694 I24
	3459	G10	5545	A18	9697 M12
M	3460	H 9	5545	A18	9699 N12
	3461	H10	5549	D26	
	3462	C 5	5554	D23	
	3463	E 4	5563	C25	
	3464	F 4	5582	F16	
	3465	G 8	5588	B17	
	3466	A 7	5600	J 5	
	3467	H 8	5605	J 5	
N	3468	A 6	5606	K 3	
	3469	A 5	5619	L 4	
	3470	A11	5625	H 9	
	3471	G 6	5630	I17	
	3472	G 5	5631	I21	
	3473	G 5	5632	N12	
	3474	F14	5875	J10	
	3475	A10	6464	C11	
O	3476	B 2	6470	F 2	
	3477	F21	6483	G13	
	3478	F21	6503	J25	
	3479	G12	6504	I24	
	3480	G12	6505	K24	

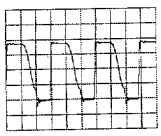
CHASSIS GR2.4

CL46532061/016.DPAR
181094

TP1 = DC 15V9

TP2 = DC -15V9

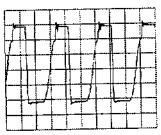
TP3



20V/div AC
5µs div

TP4 = DC 9V7

TP5

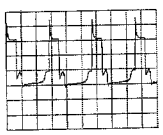


5V/div AC
5µs div

TP6 = DC 4V8

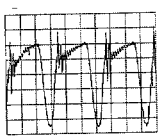
TP7 = DC 298V

TP8



2V/div AC
5µs div

TP9



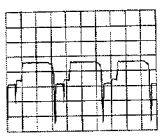
0.2V/div AC
5µs div

TP10 = DC 2V4

TP11 = DC 0V

TP12 = DC 2V7

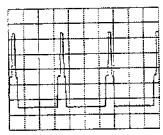
TP14



2V/div AC
20µs div

TP15 = DC 13V4

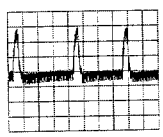
TP16



2V/div AC
20µs div

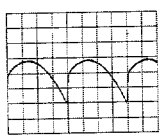
TP17 = DC 0V

TP18



2V/div AC
5ms div

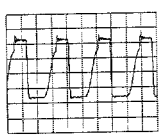
TP19



1V/div AC
5ms div

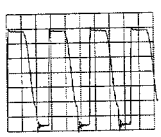
(1) = DC 298V

(2)



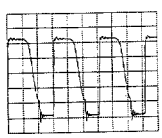
10V/div AC
5µs div

(3)



50V/div AC
5µs div

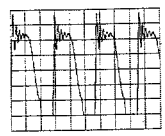
(4)



5V/div AC
5µs div

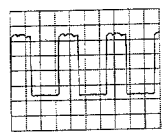
(5a) = DC 144V

(6)



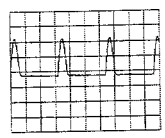
100V/div AC
5µs div

(7)



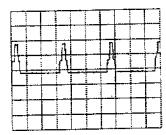
0.5V/div AC
20µs div

(8)



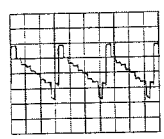
1V/div AC
20µs div

(9)

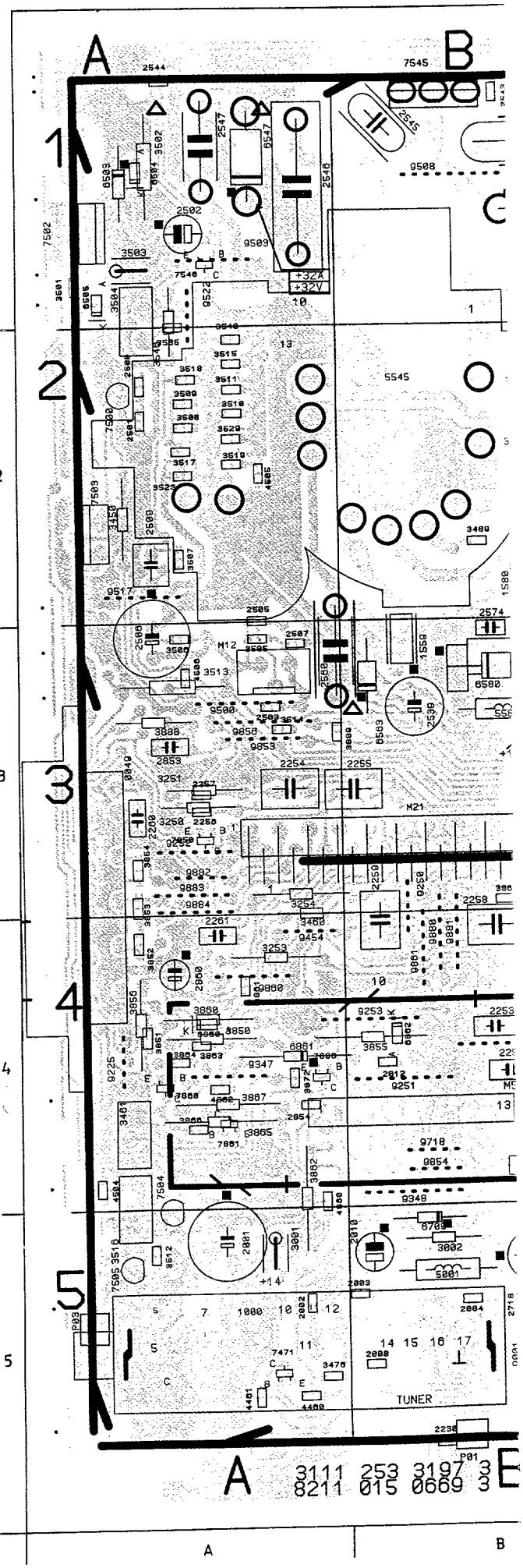


5V/div AC
20µs div

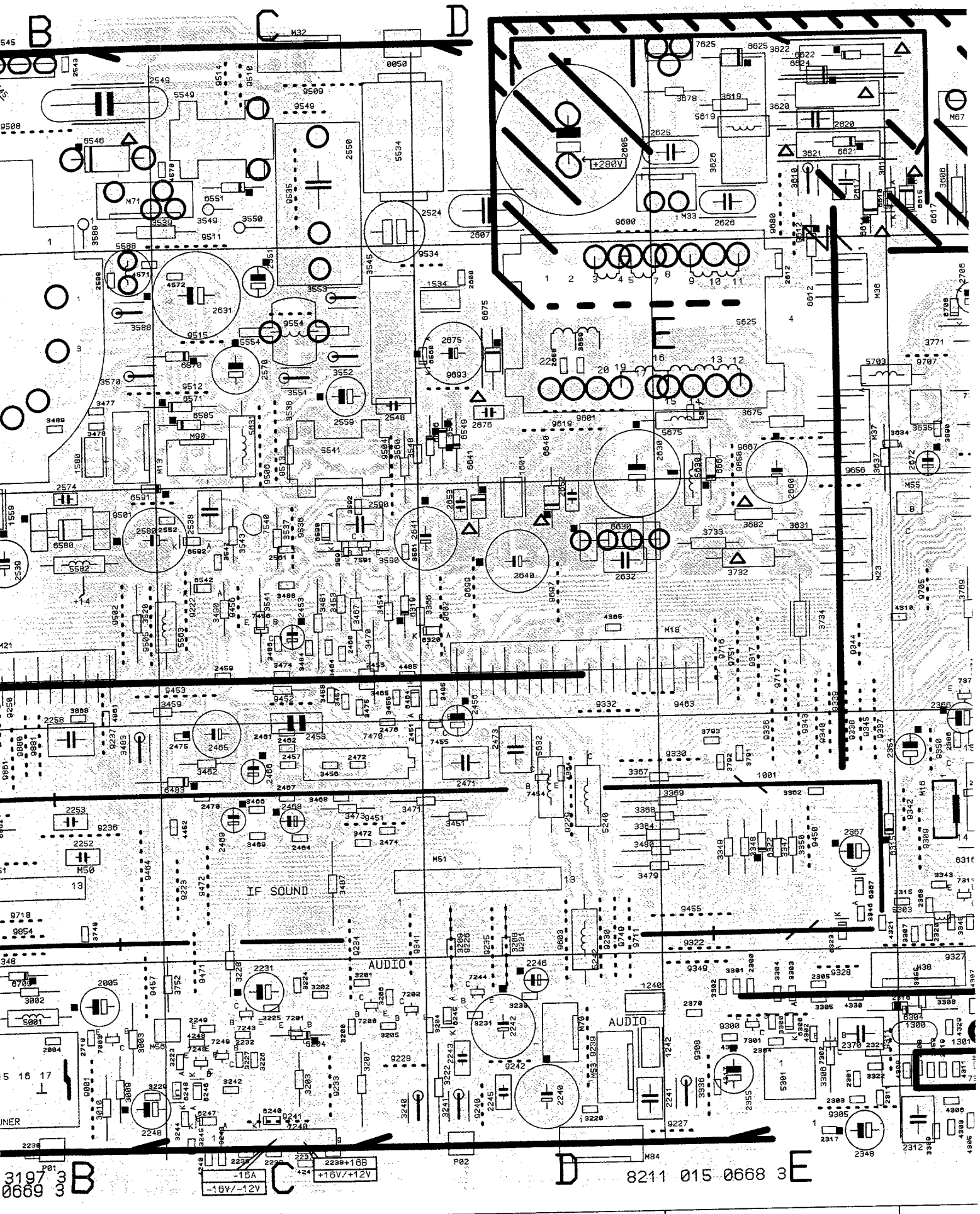
(10)

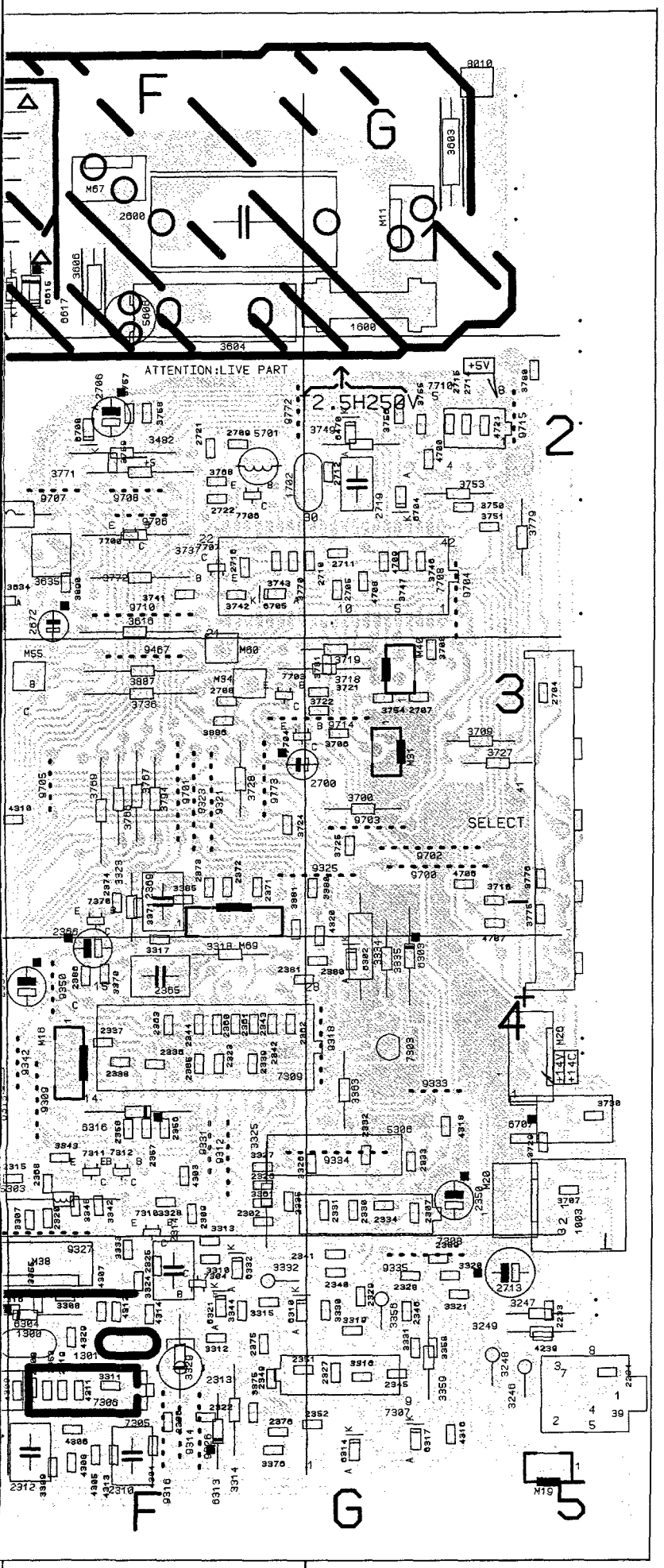


0.5V/div AC
20µs div



Mono carrier / Hauptplatine / Châssis





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1300	F5	2455	C3	3244	B5	3508	A2	3862	A4	6570	B2	9333	G4	M71	B1
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2008	B5	2468	C4	3302	E5	3520	B3	3890	F2	6621	E1	9345	E4		
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2373	F3	3225	C5	3487	C4	3793	E4	6503	A1	9318	G4	M38	E5		
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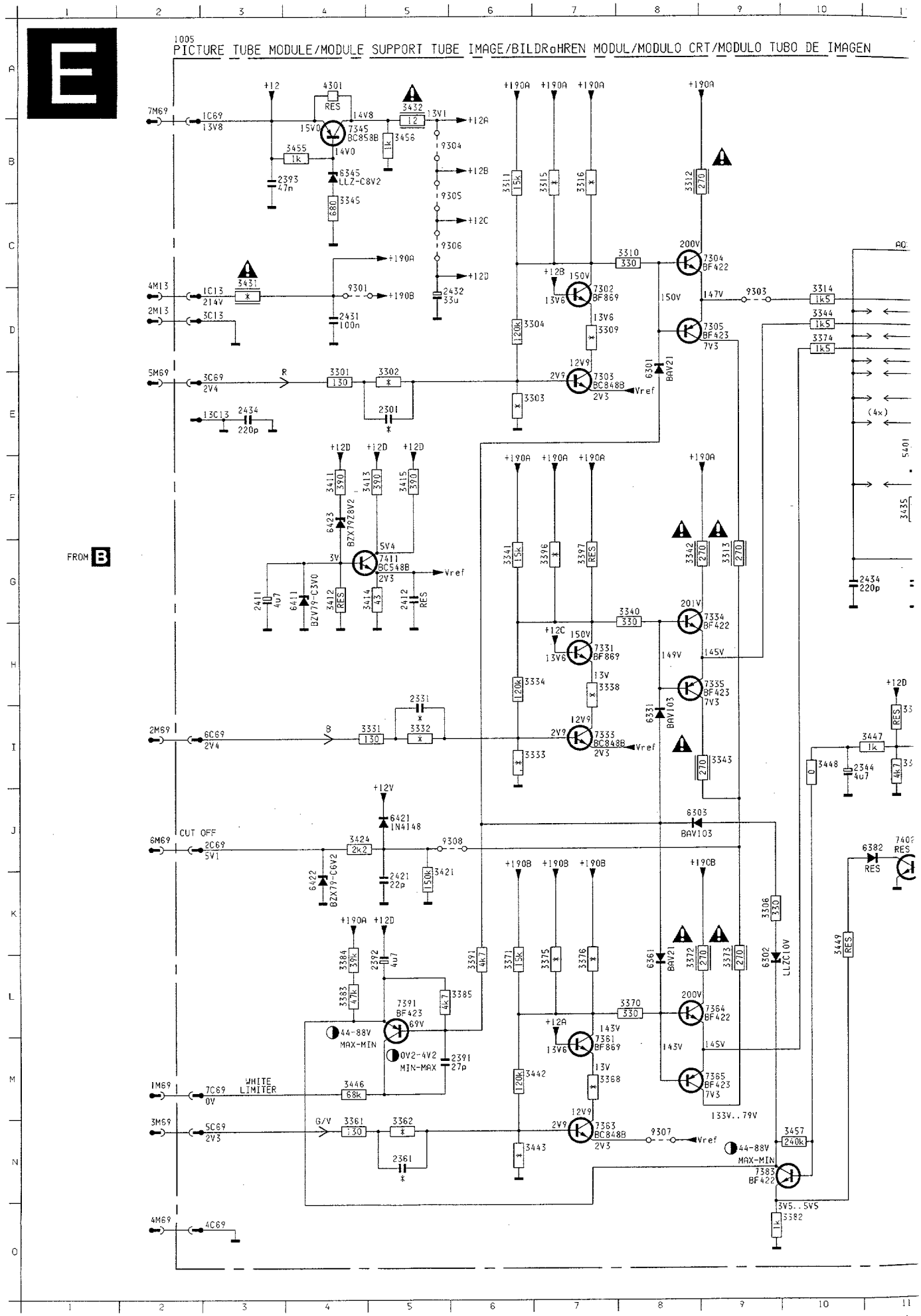
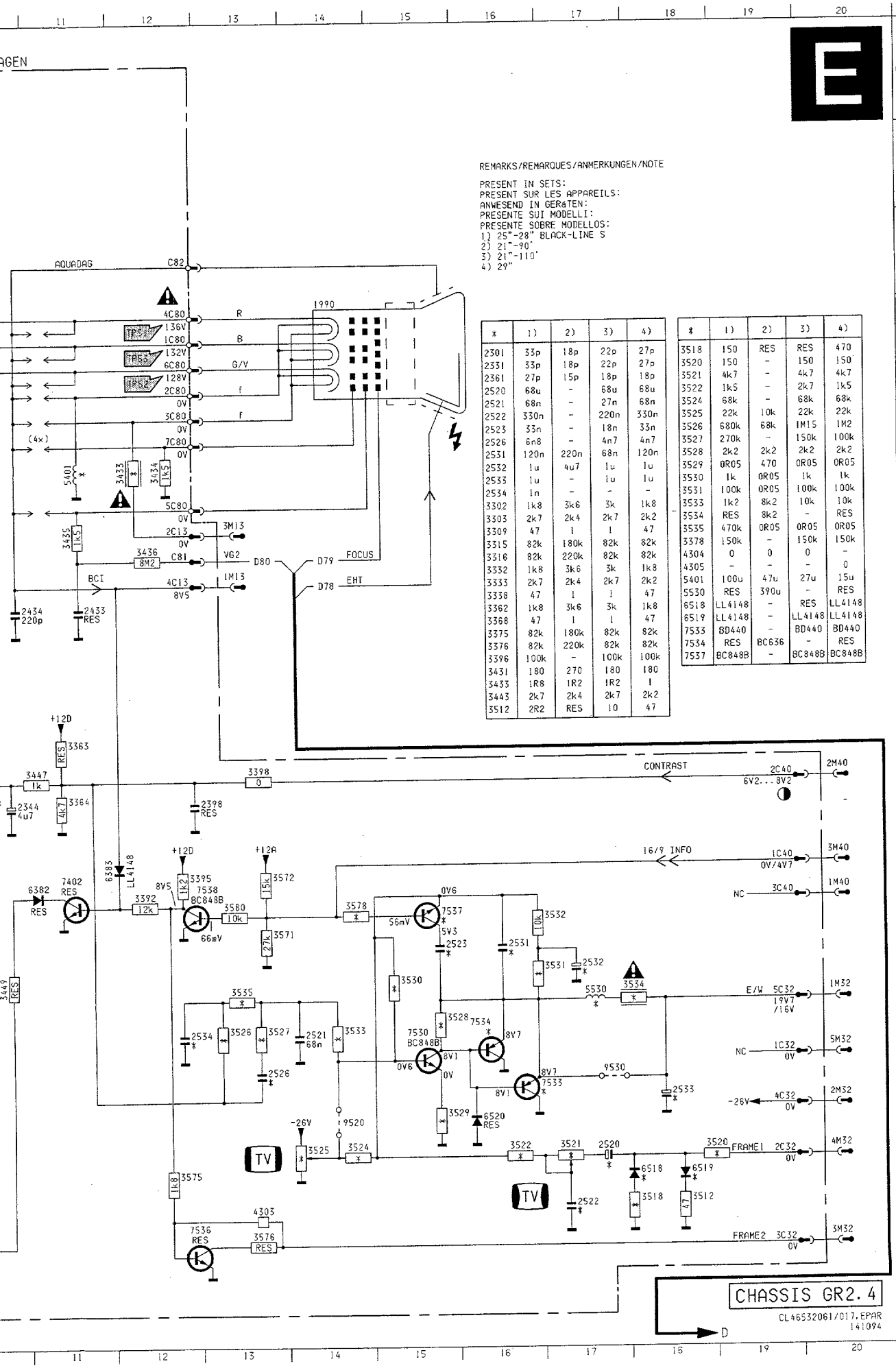
2376	F5	3228	C4	3490	C3	3851	A4	6542	C3	9323	F3	M51	D4		
2378	E5	3229	B5	3501	A1	3852	A4	6546	B1	9325	G3	M53	D5		

Picture tube panel/Bildröhren platte/Platine TRC





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2521	68n	-	27n	68n
2522	330n	-	220n	330n
2523	33n	-	18n	33n
2526	6n8	-	4n7	4n7
2531	120n	220n	68n	120n
2532	1u	4u7	1u	1u
2533	1u	-	1u	1u
2534	1n	-	-	-
3302	1k8	3k6	3k	1k8
3303	2k7	2k4	2k7	2k2
3309	47	1	1	47
3315	82k	180k	82k	82k
3316	82k	220k	82k	82k
3332	1k8	3k6	3k	1k8
3333	2k7	2k4	2k7	2k2
3338	47	1	1	47
3362	1k8	3k6	3k	1k8
3368	47	1	1	47
3375	82k	180k	82k	82k
3376	82k	220k	82k	82k
3396	100k	-	100k	100k
3431	180	270	180	180
3433	1R8	1R2	1R2	1
3443	2k7	2k4	2k7	2k2
3512	2R2	RES	10	47

*	1)	2)	3)	4)
3518	150	RES	RES	470
3520	150	-	150	150
3521	4k7	-	4k7	4k7
3522	1k5	-	2k7	1k5
3524	68k	-	68k	68k
3525	22k	10k	22k	22k
3526	680k	68k	1M15	1M2
3527	270k	-	150k	100k
3528	2k2	2k2	2k2	2k2
3529	0R05	470	0R05	0R05
3530	1k	0R05	1k	1k
3531	100k	0R05	100k	100k
3533	1k2	8k2	10k	10k
3534	RES	8k2	-	RES
3535	470k	0R05	0R05	0R05
3378	150k	-	150k	150k
4304	0	0	0	-
4305	-	-	-	0
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5530	RES	390u	-	RES
6518	LL4148	-	RES	LL4148
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7534	RES	BC636	-	RES
7537	BC848B	-	BC848B	BC848B

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2331	H 5	5401	E11
2344	I10	5530	L17
2361	N 5	6301	D 8
2391	M 5	6302	L 9
2392	L 5	6303	J 8
2393	B 3	6331	I 8
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2411	G 3	6361	L 8
2412	G 5	6382	J11
2421	K 5	6383	J11
2431	D 4	6411	G 4
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3529	M15		
3530	K15		
3531	K17		
3532	K17		
3533	L14		
3534	L18		
3535	L13		
3571	K13		
3572	J13		
3575	N12		
3576	N13		
3578	K14		

K13
A 4
N13
E11
L17
D 8
L 9
J 8
I 8
B 4
L 8
J11
J11
G 4
J 5
K 4
F 4
N18
N18
M16
D 7
E 7
C 9
D 9
H 7
I 7
H 9
H 9
B 4
M 7
N 7
L 9
M 9
N 9
L 5
J11
G 5
L15
M16
L16
N12
K15
J12
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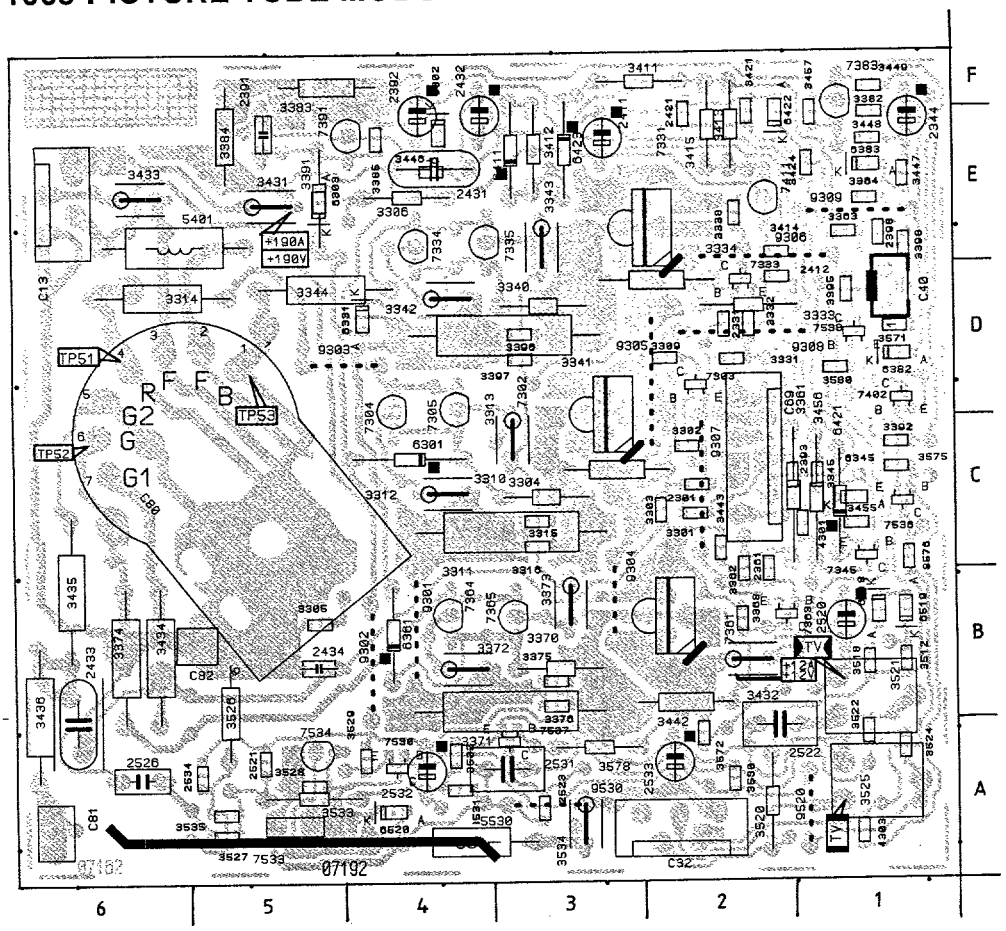
O 3
D 9
B 5
B 5
C 5
N 8
J 5
O 3
L17

1005 PICTURE TUBE MODULE



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2344	E1	3374	B6	3578	A3	C40	D1
2361	C2	3375	B3	3580	D1	C69	C2
2391	E5	3376	B3	4301	C1	C80	C5
2392	E4	3382	E1	4303	A1	C81	A6
2393	C1	3383	F5	5401	E6	C82	B5
2398	E1	3384	E5	6301	C4		
2411	E3	3385	E4	6302	E4		
2412	D2	3391	E5	6303	E5		
2421	E2	3392	C1	6331	D4		
2431	E4	3395	D1	6345	C1		
2432	E4	3396	D3	6361	B4		
2433	B6	3397	D3	6382	D1		
2434	B5	3398	E1	6383	E1		
2520	B1	3411	F2	6411	E3		
2521	A5	3412	E3	6421	C1		
2522	A2	3413	E2	6422	E2		
2523	A3	3414	E2	6423	E3		
2526	A6	3415	E2	6518	B1		
2531	A3	3421	F2	6519	B1		
2532	A4	3424	E1	6520	A4		
2533	A2	3431	E5	7302	D3		
2534	A5	3432	B2	7303	D2		
3301	C2	3433	E6	7304	D4		
3302	C2	3434	B6	7305	D4		
3303	C2	3435	B6	7331	E2		
3304	C3	3436	B6	7333	D2		
3305	B5	3442	B2	7334	E4		
3306	E4	3443	C2	7335	E3		
3309	D2	3446	E4	7345	C1		
3310	C3	3447	E1	7361	B2		
3311	C3	3448	E1	7363	B2		
3312	C4	3449	F1	7364	B4		
3313	C3	3455	C1	7365	B3		
3314	D6	3456	C1	7383	F1		
3315	C3	3457	E1	7391	E4		
3316	C3	3512	B1	7402	D1		
3331	D2	3518	B1	7411	E2		
3332	D2	3520	A2	7530	A4		
3333	D2	3521	B1	7533	A5		
3334	D2	3522	A1	7534	A5		
3338	E2	3524	A1	7536	C1		
3340	D3	3525	A1	7537	A3		
3341	D3	3526	B5	7538	D1		
3342	D4	3527	A5	9301	B4		
3343	E3	3528	A5	9302	B4		
3344	D5	3529	A4	9303	D4		
3345	C1	3530	A2	9304	B3		
3361	C1	3531	A4	9305	D2		
3362	C2	3532	A4	9306	E2		
3363	E1	3533	A5	9307	C2		
3364	E1	3534	A3	9308	D2		
3368	B2	3535	A5	9309	E1		
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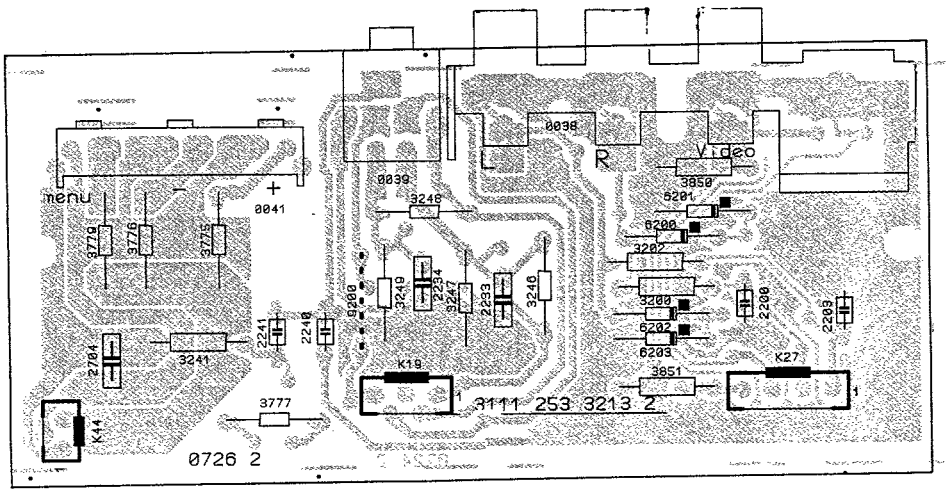
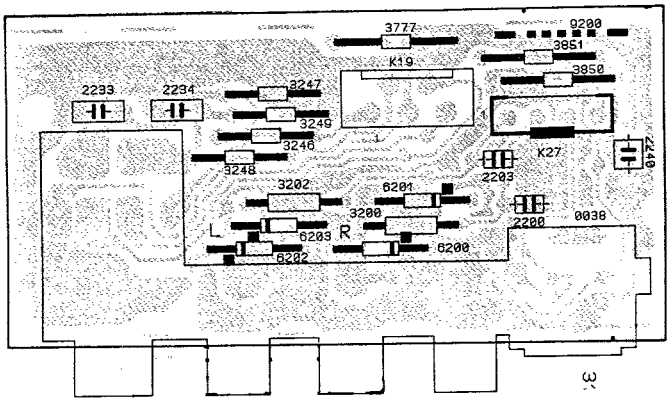
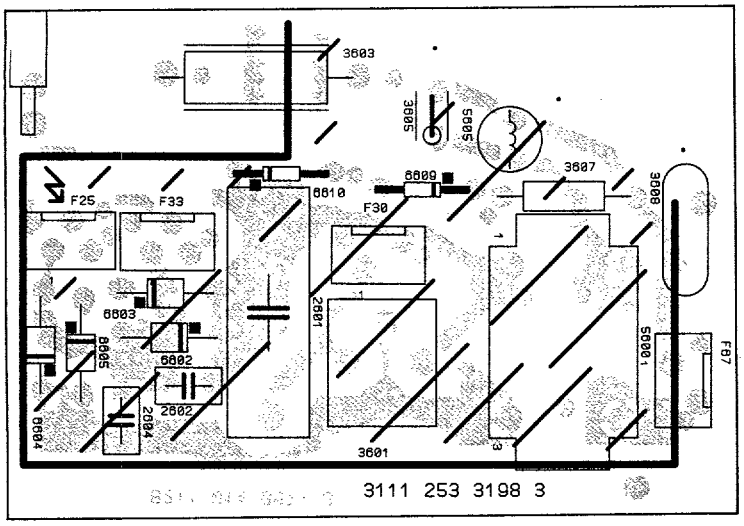
1060 SEPARATE CONTROL MODULE



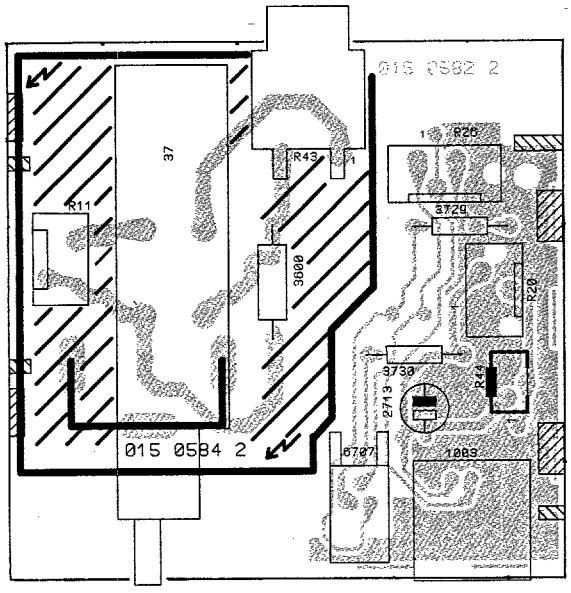
1060 SEPARATE CONTROL MODULE 29"



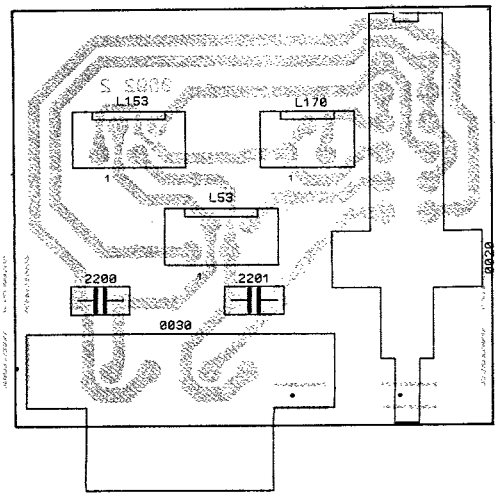
1002 MAINS FILTER MODULE



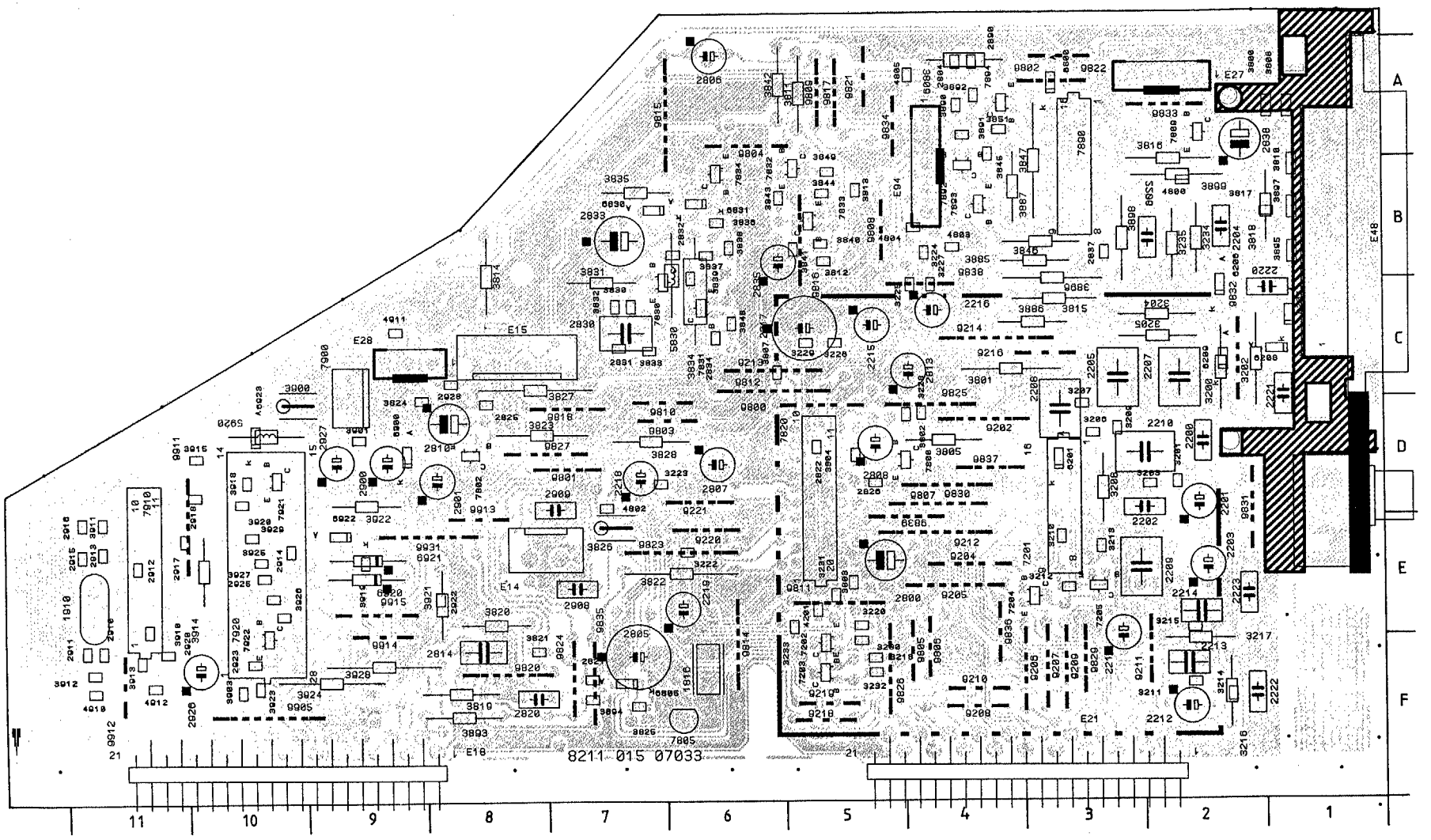
1050 SEPARATE MAINS MODULE



1040 EXTERNAL LOUDSPEAKER MODULE



1003 TELETEXT MODULE 4/3



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1001 C1	2210 D2	2804 A4	2833 B7	2915 E11	3204 C2	3220 F5	3800 A1	3816 B2	3832 C7	3847 B3	3898 B3	3922 E9	4911 C9	6921 E9	7832 B5	9206 F3	9801 D7	9817 A5	9834 A4	E18 G10
1002 C1	2211 F3	2805 F7	2834 C6	2916 E11	3205 C2	3222 E6	3801 C3	3817 B1	3833 C6	3848 C6	3899 B2	3923 F10	4912 F11	6922 E9	7833 B5	9207 F3	9802 A3	9818 D7	9835 F7	E21 G3
1003 C1	2212 F2	2807 D6	2835 C5	2917 E10	3206 D3	3223 D6	3802 D4	3818 B1	3834 C6	3849 B5	3900 D9	3924 F9	5830 C6	6923 D10	7834 B6	9208 F4	9803 D6	9820 F8	9836 F4	E27 A2
1816 F6	2213 F2	2808 D5	2837 C3	2918 E10	3207 D3	3224 C4	3803 E5	3819 F8	3835 B7	3851 B4	3901 D9	3925 E10	5920 D10	7201 E3	7890 B3	9209 F3	9804 B6	9821 A5	9837 D4	E28 C8
1910 E11	2214 F2	2810 D8	2838 B2	2920 F11	3208 E3	3225 C4	3804 D5	3820 F8	3836 B6	3885 C3	3903 F10	3926 F10	6201 D3	7202 F5	7892 B4	9210 F4	9805 F4	9822 A3	9838 C4	E48 C1
2200 D2	2215 C5	2813 D4	2890 A4	2922 E8	3209 D3	3226 C5	3805 D4	3821 F7	3837 C6	3886 C3	3910 F11	3927 E10	6206 C2	7203 F5	7893 B4	9211 F2	9806 F4	9823 E6	9839 E4	E94 B4
2201 E2	2216 C4	2814 F8	2900 D9	2923 F10	3210 E3	3227 C4	3807 D5	3822 E6	3838 B6	3887 B3	3911 E11	3928 F9	6207 C1	7204 E3	7894 A3	9212 E4	9807 E4	9824 F7	9905 F10	
2202 E2	2217 C5	2820 F7	2901 D8	2925 E10	3211 F2	3228 D4	3808 A1	3823 D7	3839 C6	3890 A4	3912 F11	3929 E10	6208 C1	7205 E3	7900 D9	9213 D5	9808 B5	9825 D4	9911 E10	
2203 E2	2218 D7	2821 F7	2908 E7	2926 F10	3212 E3	3229 C5	3809 A4	3824 D8	3840 B5	3891 B4	3913 F11	4201 F5	6209 C2	7800 D4	7910 E11	9214 C4	9809 A5	9826 F4	9912 F11	
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2205 D3	2220 C1	2825 D8	2910 F11	2928 D8	3214 F2	3231 E5	3811 A5	3826 E7	3842 A5	3893 F8	3915 D10	4802 E7	6805 F7	7805 F6	7921 D10	9218 F5	9811 E5	9829 F3	9914 F9	
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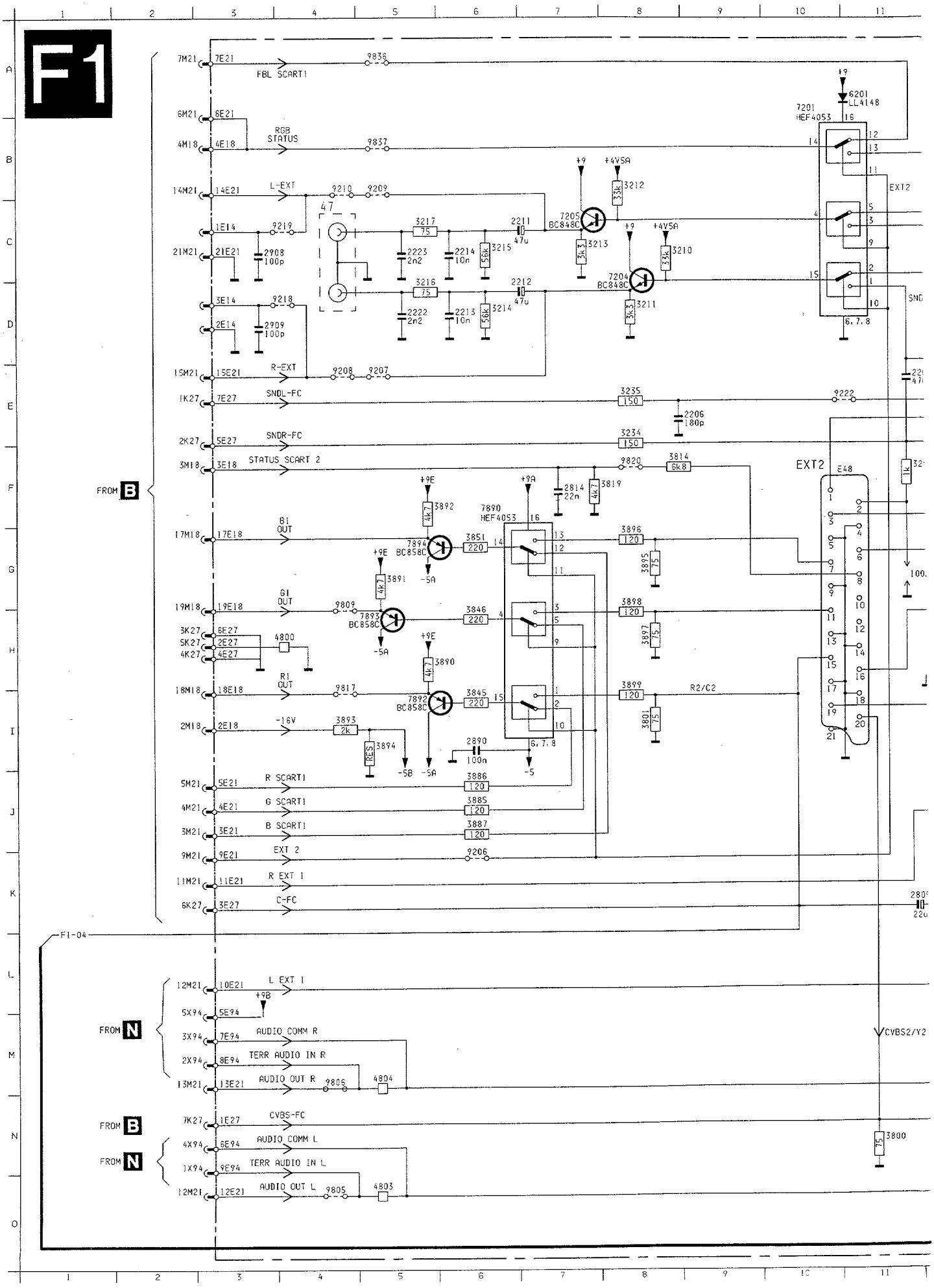
2207 D2	2222 F1	2830 C7	2912 E11	3201 D2	3216 F2	3233 F5	3813 B5	3828 D6	3844 B5	3895 C1	3919 E9	4804 B4	6831 B6	7820 E5	9202 D4	9220 E6	9814 F6	9831 E1	9931 E8	
2208 D3	2223 E1	2831 C7	2913 E11	3202 C1	3217 F2	3234 B2	3814 C8	3830 C7	3845 B4	3896 C3	3920 E10	4805 A4	6900 D8	7830 C6	9204 E4	9221 E6	9815 A6	9832 C2	E14 E7	

Teletext/Videotext/Télétexte



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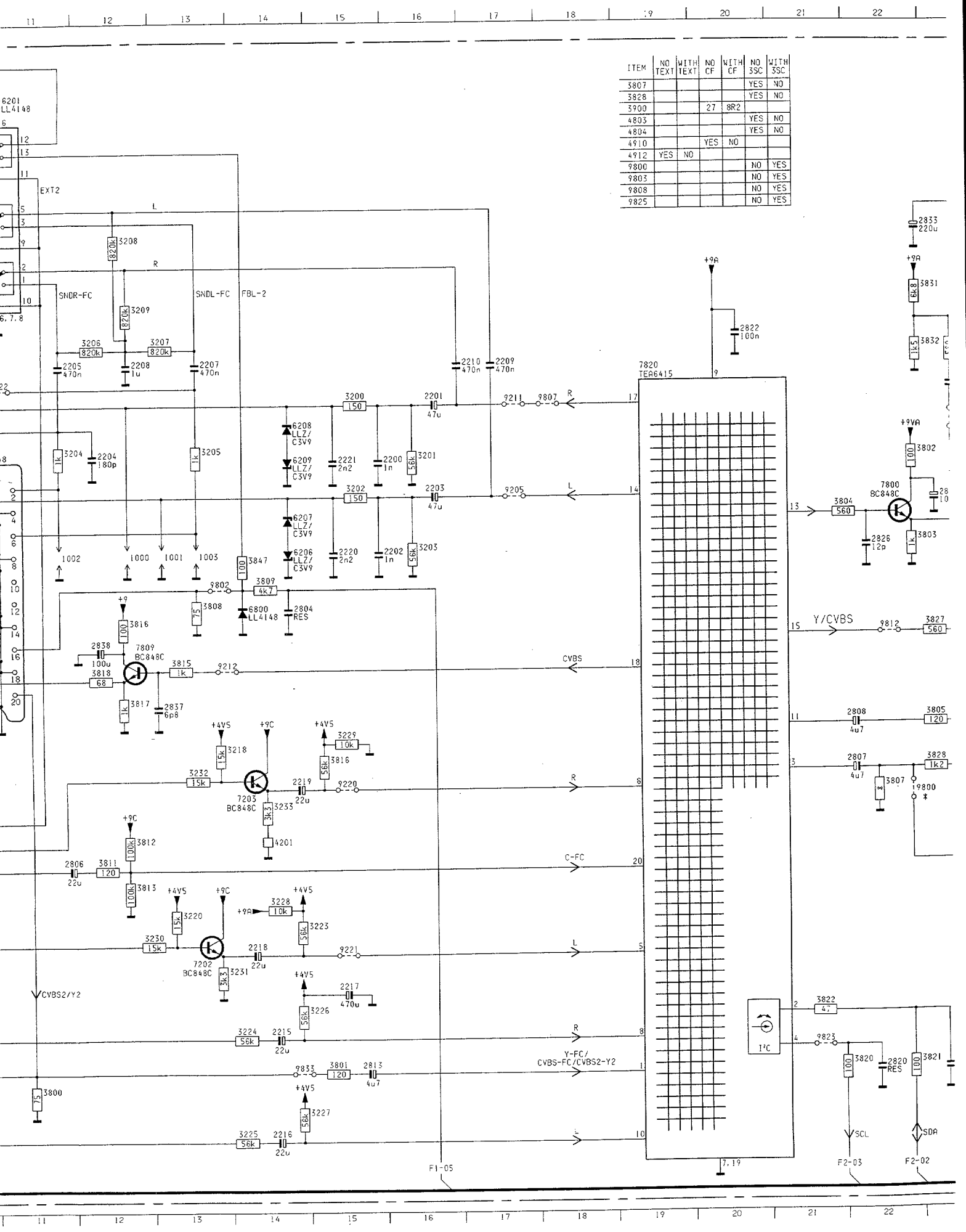
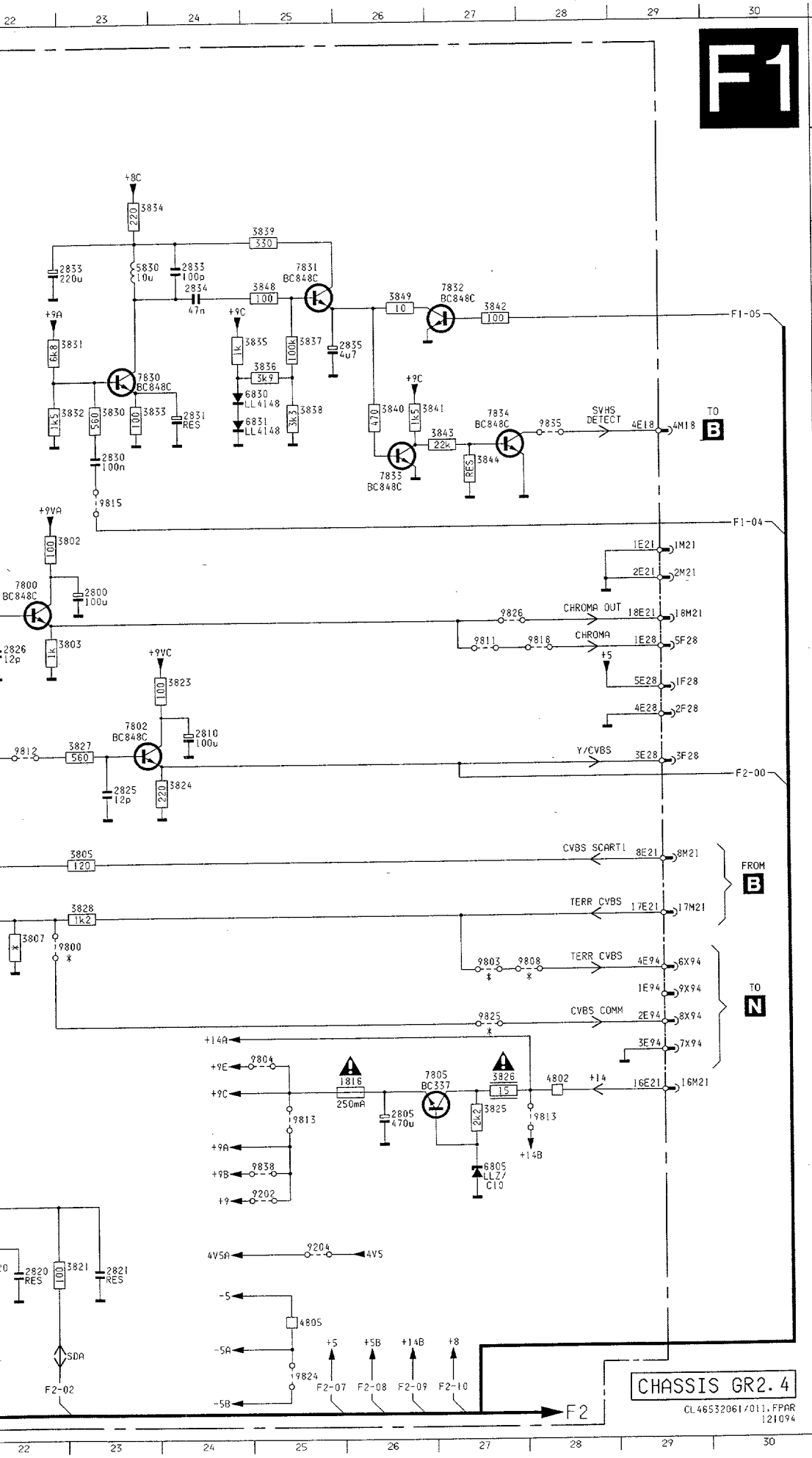
3828					YES	NO
3900			27	8R2		
4803					YES	NO
4804					YES	NO
4910			YES	NO		
4912	YES	NO				
9800					NO	YES
9803					NO	YES
9808					NO	YES
9825					NO	YES





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	1002	G11	3831	D23
	1003	G13	3832	D23
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	2200	F16	3834	B23
	2201	E16	3835	D25
	2202	G16	3836	D25
	2203	F16	3837	D25
	2204	F12	3838	D25
	2205	E11	3839	C25
	2206	E 9	3840	D26
B	2207	E13	3841	D26
	2208	E12	3842	C27
	2209	E17	3843	E27
	2210	E17	3844	E27
	2211	C 7	3845	I 6
	2212	D 7	3846	H 6
	2213	D 6	3847	G14
	2214	C 6	3848	C25
C	2215	M14	3849	C26
	2216	O14	3851	G 6
	2217	M15	3885	J 6
	2218	L14	3886	J 6
	2219	J14	3887	J 6
	2220	G15	3890	H 5
	2221	F15	3891	G 5
D	2222	D 5	3892	F 5
	2223	C 5	3893	I 4
	2800	F23	3894	I 5
	2804	H14	3895	G 8
	2805	L26	3896	G 8
	2806	K11	3897	H 8
	2807	J22	3898	G 8
	2808	I22	3899	I 8
E	2810	H24	4201	K14
	2813	N15	47	C 4
	2814	F 7	4802	L28
	2820	N22	4803	O 5
	2821	N23	4804	M 5
	2822	D20	4805	N25
	2825	I23	5830	C23
F	2826	G22	6201	A11
	2830	E23	6206	G14
	2830	E23	6207	G14
	2831	E24	6208	F14
	2833	C23	6209	F14
	2833	C24	6800	H14
	2834	C24	6805	M27
	2835	D26	6830	D25
G	2837	I13	6831	E25
	2838	H12	7201	A10
	2890	I 6	7202	L13
	2908	C 3	7203	J14
	2909	D 3	7204	D 8
	3200	E15	7205	C 7
	3201	F16	7800	F22
H	3202	F15	7802	H23
	3203	G16	7805	L26
	3204	F11	7809	H12
	3205	F13	7820	E19
	3206	D12	7830	D23
	3207	D13	7831	C25
	3208	C12	7832	C27
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	3213	C 7	7893	H 5
	3214	D 6	7894	G 5
	3215	C 6	9202	M25
	3216	D 5	9204	N25
J	3217	C 5	9205	F17
	3218	J13	9206	K 6
	3220	L13	9207	E 5
	3223	L14	9208	E 4
	3224	M14	9209	B 5
	3225	O14	9210	B 4
	3226	M14	9211	E17
	3227	N14	9212	I13
K	3228	L14	9218	D 4
	3229	J15	9219	C 4
	3230	L12	9220	J15
	3231	L13	9221	L15
	3232	J13	9222	E11
	3233	J14	9800	J22
	3234	E 8	9802	H13
	3235	E 8	9803	K27
L	3800	N11	9804	L25
	3801	I 8	9805	O 4
	3801	N15	9806	M 4
	3802	F22	9807	E18
	3803	G22	9808	K28
	3804	G21	9809	H 4
	3805	I23	9811	G27
M	3807	J22	9812	H22
	3808	H13	9813	L25
	3809	G14	9813	L28
	3811	K12	9815	E23
	3812	K12	9817	I 4
	3813	K12	9818	G28
	3814	F 8	9820	F 8
	3815	I13	9823	N21
N	3816	H12	9824	O25
	3816	J15	9825	K27
	3817	I12	9826	G27
	3818	I12	9833	N14
	3819	F 8	9835	E28
	3820	N22	9836	A 5
	3821	N22	9837	B 5
	3822	M21	9838	M25
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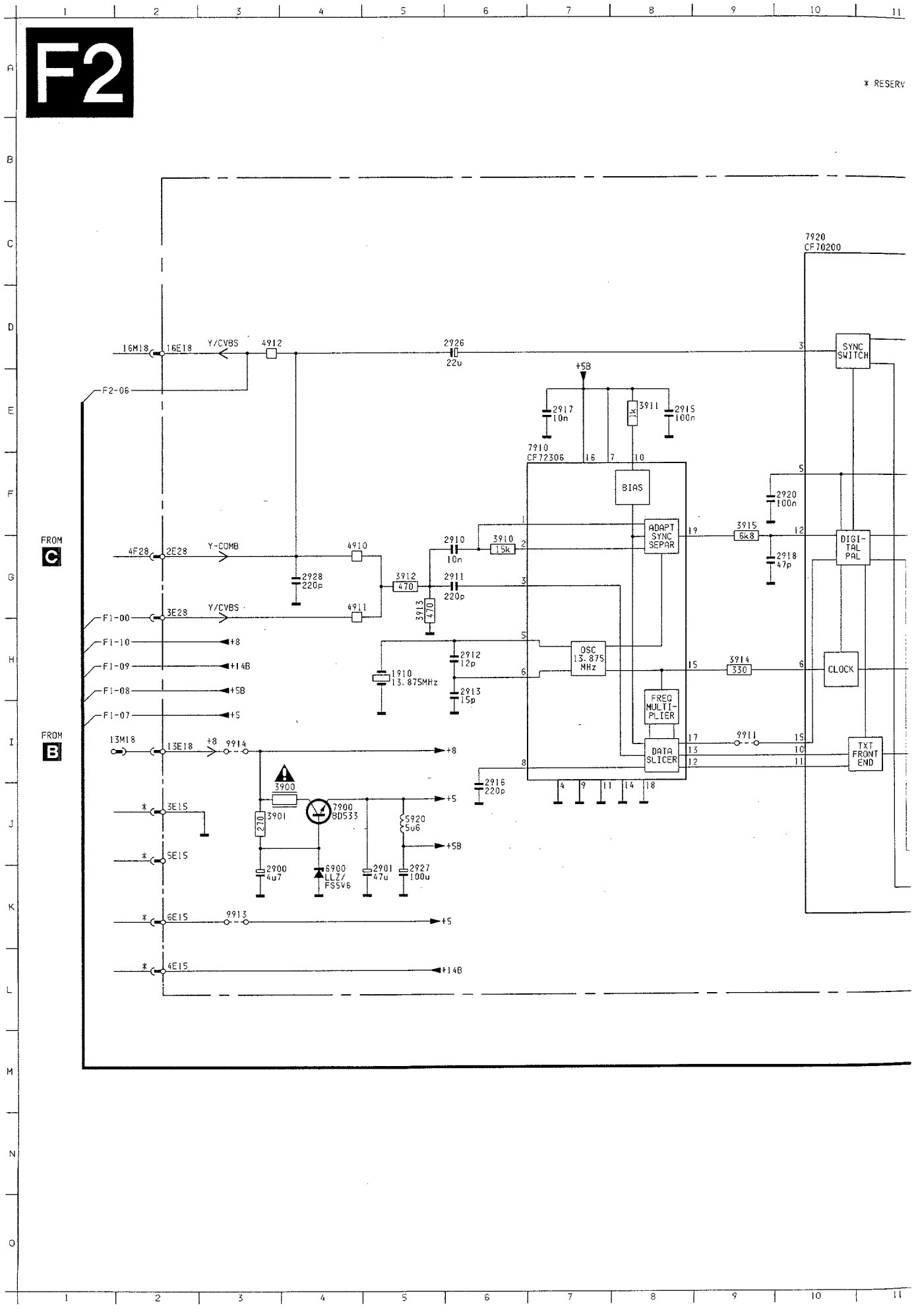
	3825	L27		
	3826	L27		
	3827	H23		

Teletext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16M18
16E18
Y/CVBS
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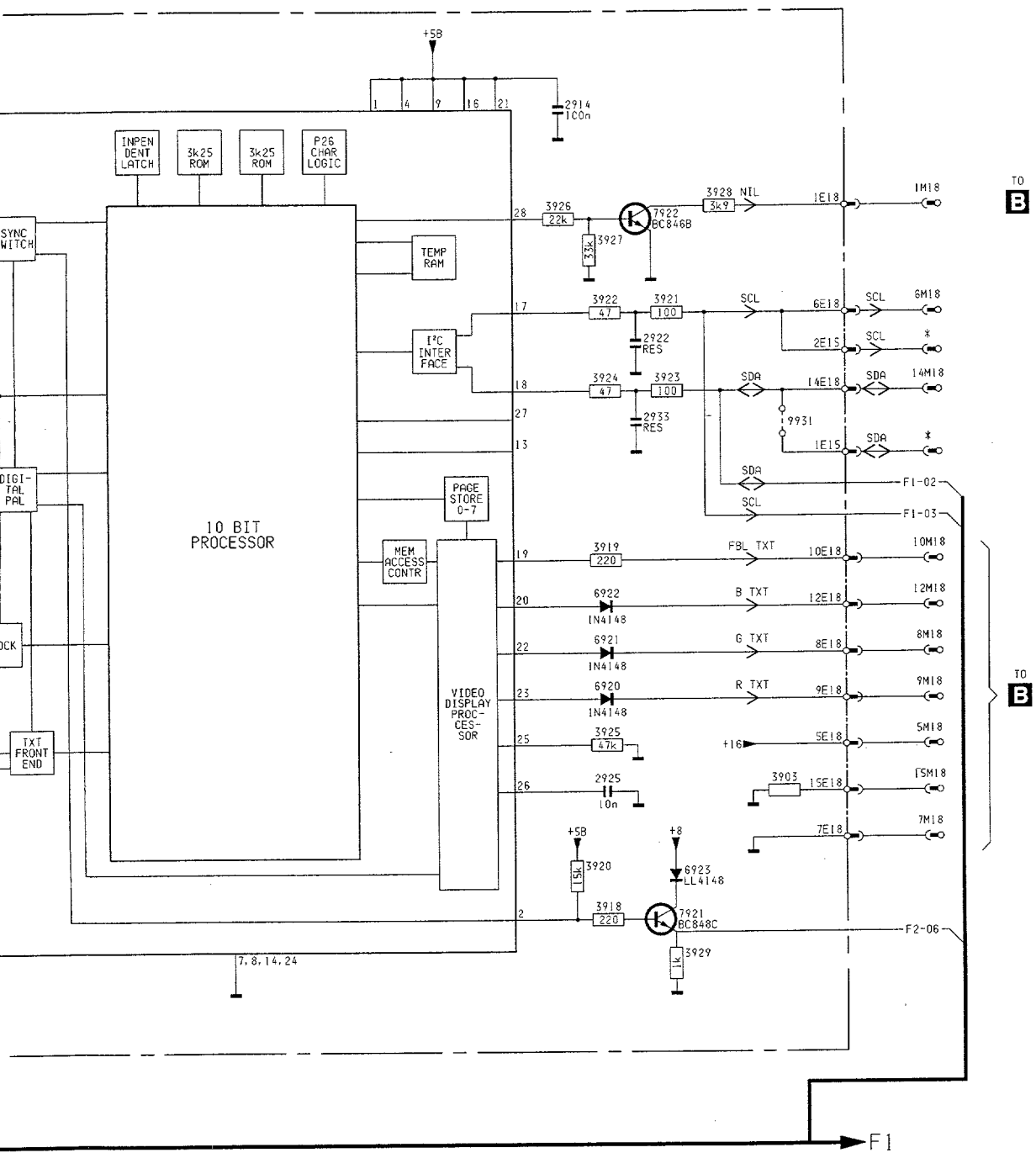
22u
F2-06
+5B
2917
10n
3911
1k
2915
100n
7910
CF72306
16
7
10
BIAS
ADAPT
SYNC
SEPAR
19
3915
6k8
12
2920
100n
2918
47p
SYNC
SWITCH
DIGI-
TAL
PAL
FROM
C
4F28
2E28
Y-COMB
4910
2910
10n
3910
15k
2928
220p
3912
470
2911
220p
3913
470
4911
F1-00
3E28
Y/CVBS
F1-10
+8
F1-09
+14B
F1-08
+5B
F1-07
+5
OSC
13.875
MHz
1910
13.875MHz
2912
12p
2913
15p
15
3914
330
6
CLOCK
FREQ
MULTI-
PLIER
FROM
B
13M18
13E18
+8
9914
+8
17
9911
15
13
10
12
11
TXT
FRONT
END
DATA
SLICER
8
2916
220p
4
9
11
14
18
3900
3E15
3901
270
7900
BD533
+5
5920
5u6
+5B
5E15
2900
4u7
6900
LLZ/
FSSV6
2901
47u
2927
100u
6E15
9913
+5
4E15
+14B

F2

* RESERVED FOR DOLBY



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A	2911	G 6
	2912	H 6
	2913	H 6
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	2916	J 6
	2917	E 7
	2918	G 9
B	2920	F 9
	2922	E17
	2925	J17
	2926	D 6
	2927	K 5
	2928	G 3
	2933	F17
	3900	J 4
C	3901	J 3
	3903	J18
	3910	G 6
	3911	E 8
	3912	G 5
	3913	G 5
	3914	H 9
D	3915	F 9
	3918	K17
	3919	G17
	3920	J16
	3921	E17
	3922	E17
	3923	F17
	3924	F17
E	3925	I17
	3926	D16
	3927	D16
	3928	D18
	3929	K17
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	4911	G 4
F	4912	D 3
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	6920	I17
	6921	H17
	6922	H17
	6923	J17
	7900	J 4
G	7910	F 6
	7920	C10
	7921	K17
	7922	D17
	9911	I 9
	9913	K 3
	9914	I 3
H	9931	F18

CHASSIS GR2.4

CL46532061/012.FPAR
121094

Teletext

The TXT-decoder is integrated in the Euro-module.

The TXT-decoder can process the following systems:

- World Teletext System (WST)
- BBC system: FLOF (full level one feature)
- German system: TOP (table of Pages).

The TXT-decoder has a memory of 8 pages with the objective to decrease the waiting time.
The content of the memory depends on the system.

* WST with pages without sub-codes: page -1, +1, +2, +3, +4, page last received, table of contents + page displayed.

* WST with pages with sub-codes: page -1, +1, +2, next sub-page, next +1 sub-page, page last received + table of contents.

* FLOF: 4 pages linked to the coloured buttons (red, green, yellow, blue) page -1, page last displayed and table of contents.

* TOP: basic Top table, page +1, 1 or 2 subsequent group, 2 or 3 subsequent blocks, or page +1, +2.

The 'Page Look Up Table' (PLUT) is built up immediately in the 3 systems after switch-on.
The Plut ensures that only the transmitted pages are stored in the memory.

The TXT circuit consists of 2 ICs:

- IC 7910: Teletext Data Slicer: CF 72306.
- IC 7920: Universal Teletext Decoder: 'Eurotext': CF 70200.

The Teletext Data Slicer: CF 72306

The CF 72306 IC sees to:
- Sync. separation
- Teletext data processing
- Data clock regeneration
- Transfer of clock, data and composite sync. signals to the digital IC teletext decoder.

The sync. separator slicing level is adjustable, so that it can process a whole series of video amplitudes and disturbed signals.

The data slicer uses an adjustable signal recognition and clock phase algorithm, so that it can work in a broad area of clock run-in amplitudes.

- The IC has 3 video inputs (pins 1, 2, 3). Pins 1, 2 are used for sync. processing and pin 3 is used for taking TXT information from the video.
  Resistor 3910 forms LPF (Low Pass Filter) with capacity in the IC for the removal of the high frequencies at the sync. level.
  Resistors R 3912, R 3913 are adaptations of the level from 2V to 1V pp.

The TXT clock of 6.937MHz is conducted from the 13.875MHz oscillator frequency. The black level is stocked on pin 8 (C REF) via C 2916.
The frequency is raised to 69MHz via a 'Frequency multiplier', to enable the processing of all signals in the IC.

The 'OSCOUT' (pin 15) transfers the 13.876 MHz to the TXT-decoder.
R 3914 is present in order to avoid irradiation in the MF part.
During the VBi the data slicer is activated via 'WIND', so that the TXT data can come out on pin 13.
The sync. signal (pin 19) is sent to pin 12 TXT decoder via LDF filter (R 3915, C 2918).

Universal Teletext decoder 'Eurotext': CF 70200

Digital IC for the benefit of decoding the world standard systems:
- 8 pages of memory
- automatic detection of WST, FLOF, or TOP
- Packet 26 flicker-free character processing.

The TDATA, T.CIK and composite sync. of the data slicer are offered to inputs 10, 11 and 12.
The IC is connected to the I^2C line via 16 (data) and 17 (clock).

Via Flag 2 (28) the NIL signal is offered to prevent the text from flickering on the screen.

The Reset is effected via C 2920 on pin 5.

Via diodes 6920, 6921, 6922 the RGB outputs are transmitted to the TDA 4780 together with the blanking signal (pin 19).

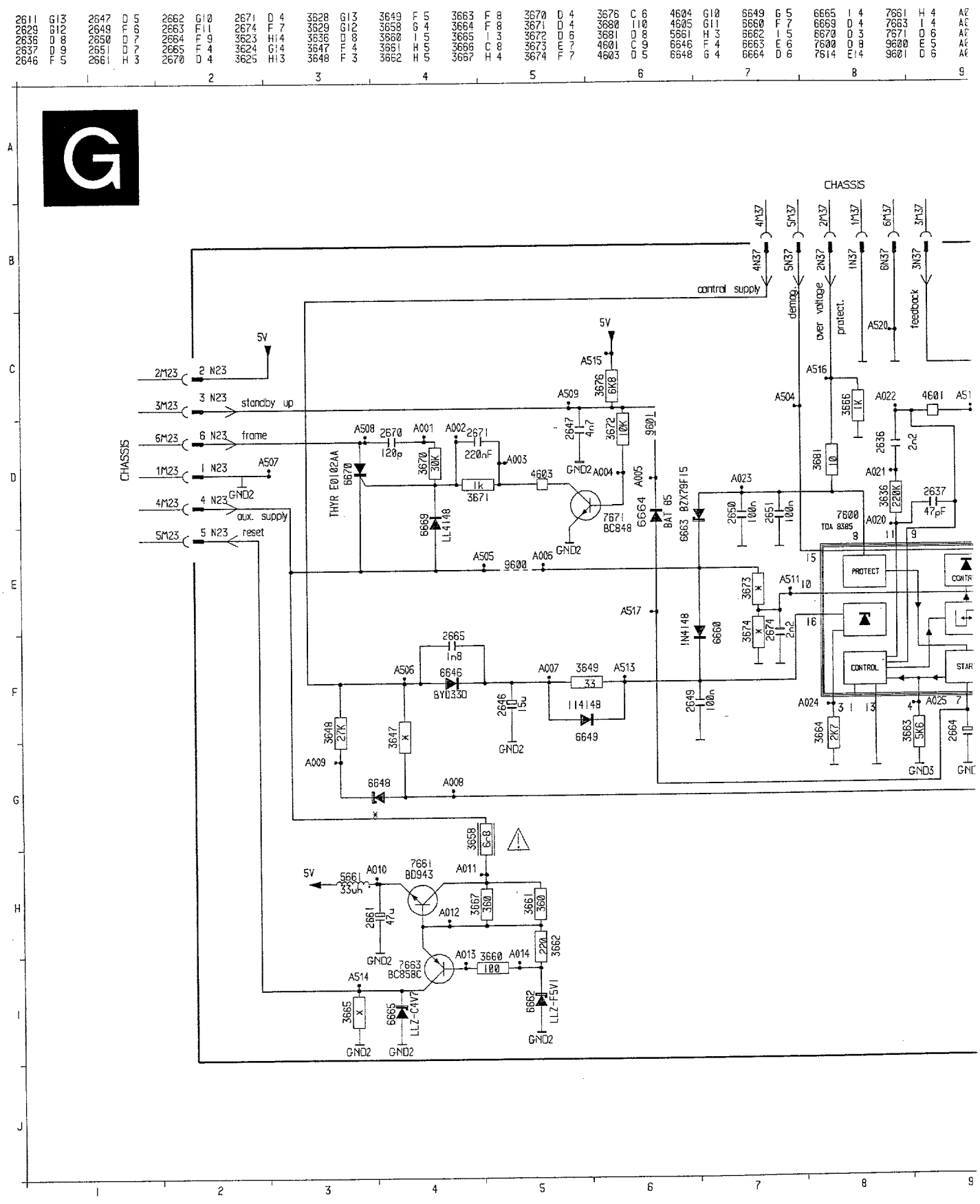
The diodes prevent 'blooming' of the text, as well as the level of the OSD being pulled down.

The amplitude of the output signals is determined by C 2925 (REF) and R 3925 (RGB set).

Pin 2 (sync. out of CSB) is the output of the internal switch, which transmits either the composite sync. signal of the internal sync. generator or the video input inlet when picture information is shown (mixed mode - subtitling).

Via the clock in (pin 6) 13.876 MHz is received from the data slicer.
Via PLL the pulses in the TXT-decoder are synchronized to the sync. of the video signal.
Character generator is available in the IC.
The internal ROM controls the decoding and the choice of the display.
In the internal RAM 8 pages can be stored.

Sops controle module

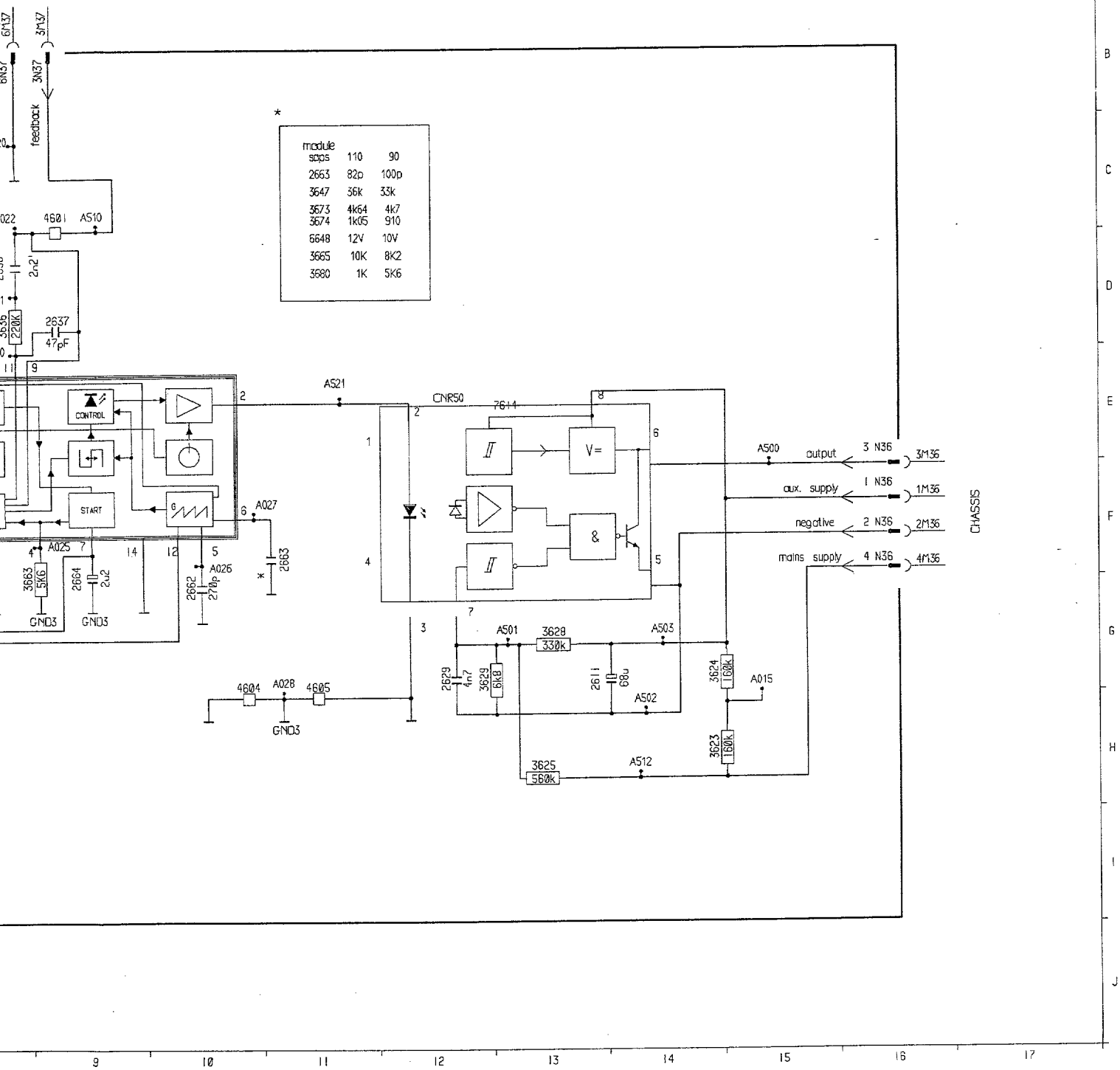


7661	H 4	A001	D 4	A006	E 5	A011	H 4	A020	E 8	A025	F 9	A501	G13	A506	F 4	A511	E 7	A516	C 8	A521	E11	N23	E 2	N36	F16	N37	B 7
7663	I 4	A002	D 4	A007	F 5	A012	H 4	A021	D 8	A026	F10	A502	H14	A507	D 3	A512	H14	A517	E 6	N23	D 2	N23	D 2	N37	B 8	N37	B 8
7671	D 6	A003	D 5	A008	G 4	A013	I 4	A022	C 8	A027	F11	A503	G14	A508	D 3	A513	F 6	A518	I10	N23	C 2	N36	F16	N37	B 8		
9600	E 5	A004	D 6	A009	G 3	A014	I 5	A023	D 7	A028	G11	A504	C 7	A509	C 6	A514	I 3	A519	I10	N23	C 2	N36	F16	N37	B 9		
9601	D 6	A005	D 6	A010	H 3	A015	G15	A024	F 8	A500	E15	A505	E 5	A510	C 9	A515	C 6	A520	C 8	N23	D 2	N36	E16	N37	B 7		

9 10 11 12 13 14 15 16 17

G

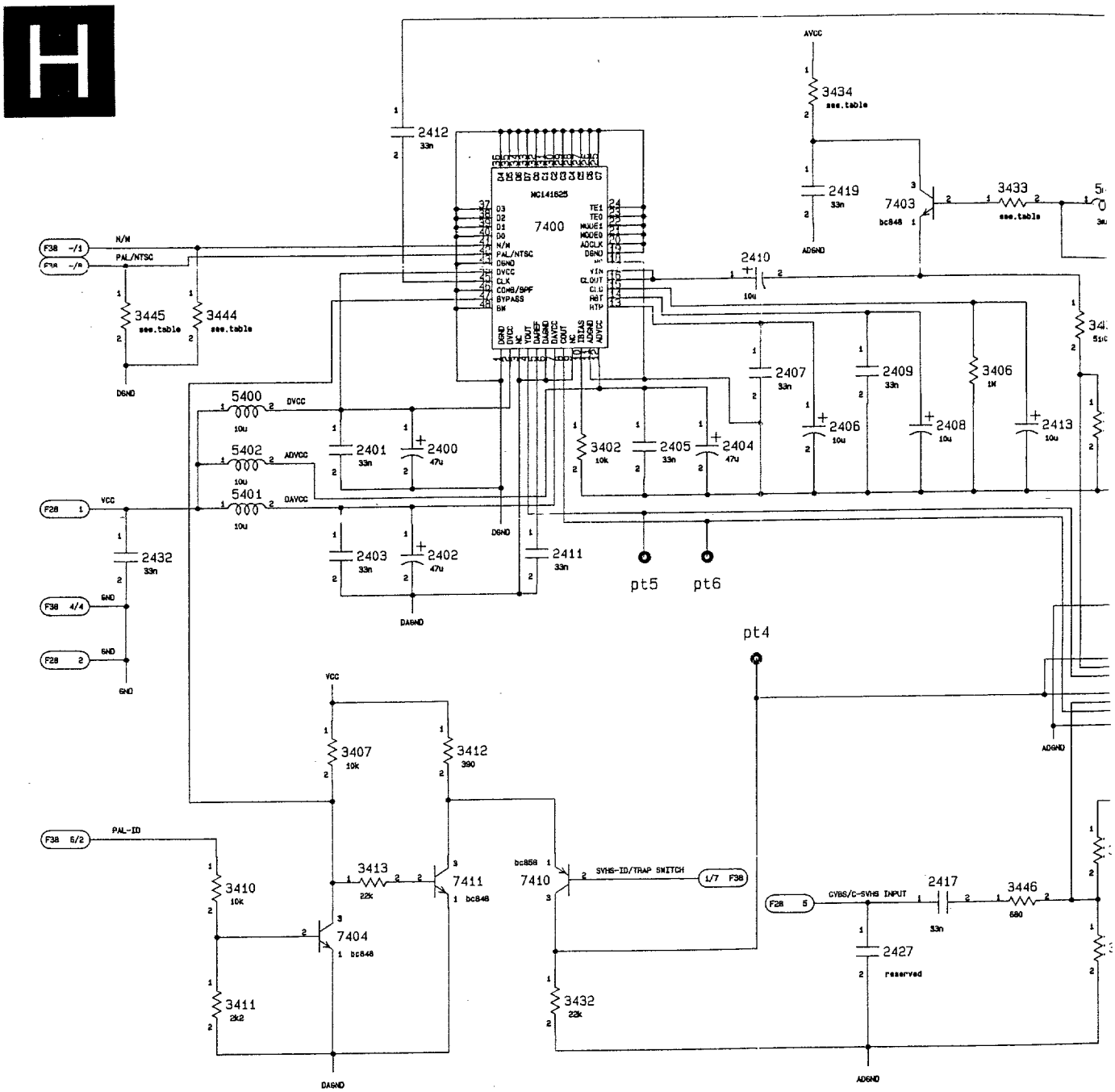
A B C D E F G H I J



*

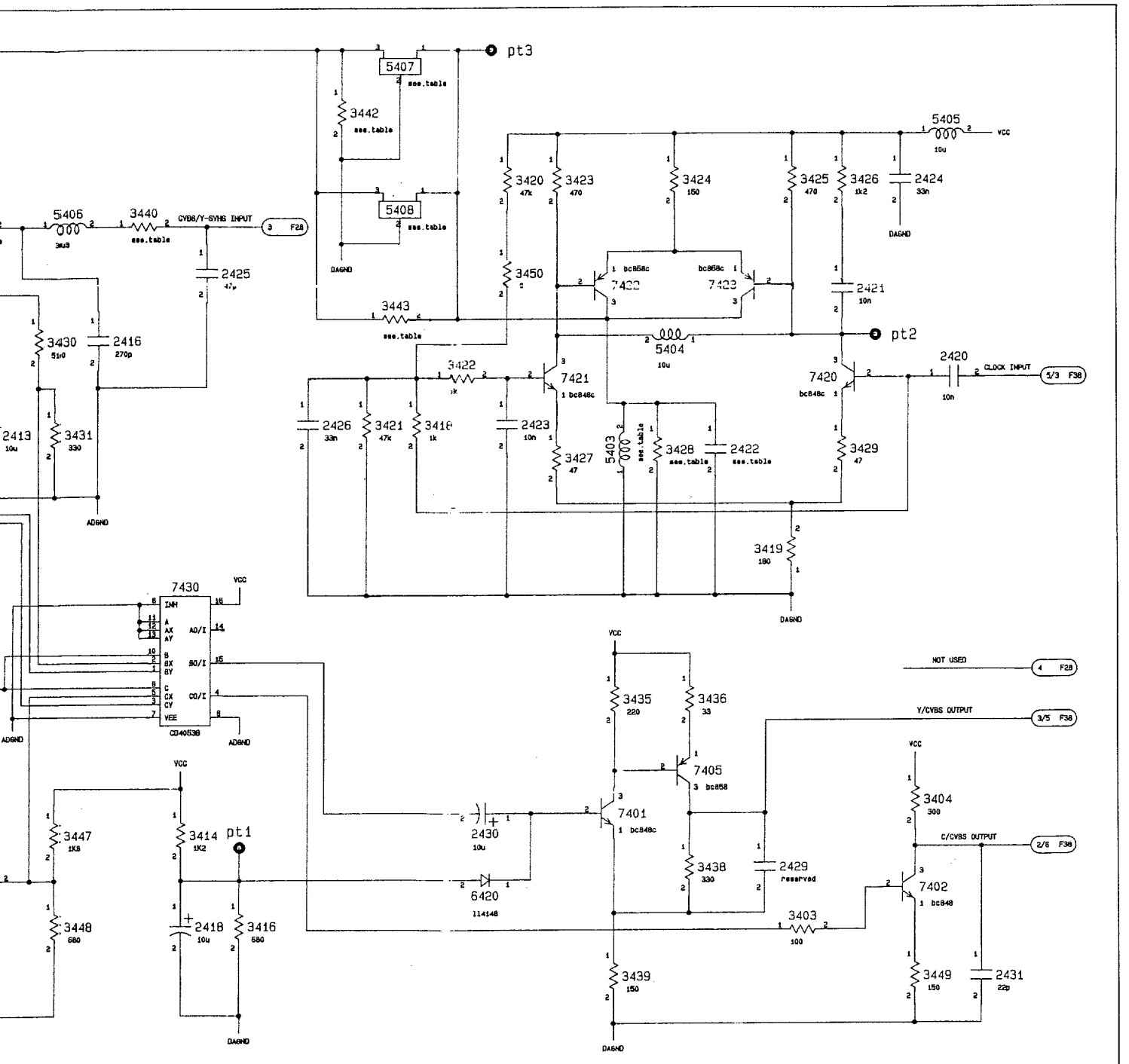
module		
sops	110	90
2663	82p	100p
3647	36k	33k
3673	4k64	4k7
3674	1k05	910
6648	12V	10V
3665	10K	8K2
3680	1K	5K6

Comb filter module



COMPONENTS

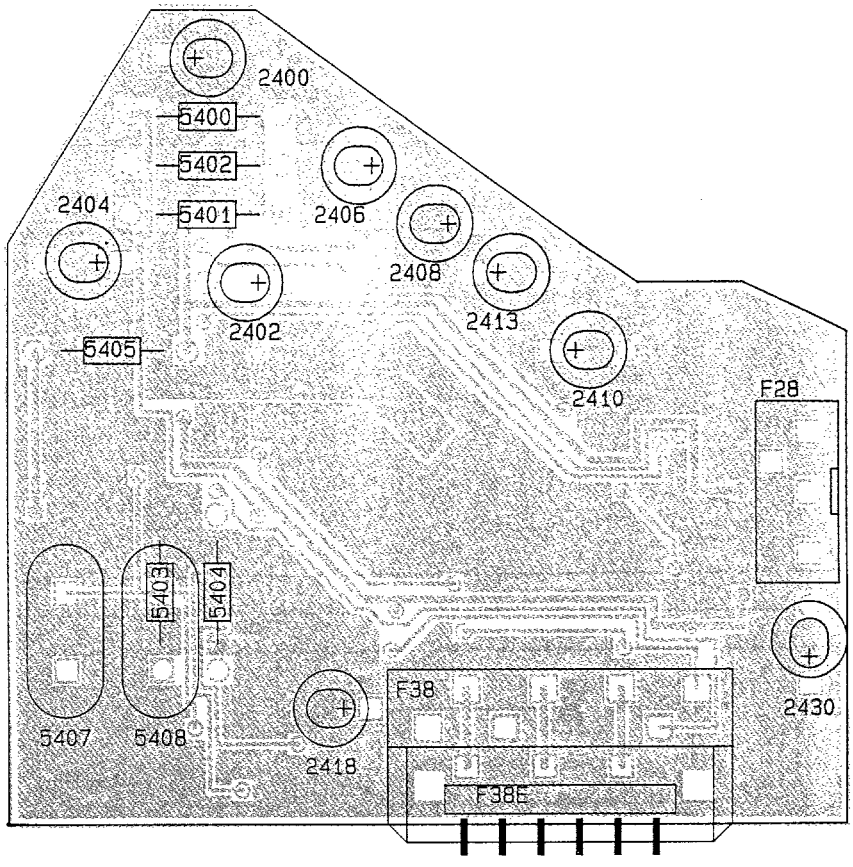
	2422	3428	5403	3443	3442	5407	5408	3444	3445	3440	3433	3434	sta
STANDARD VERSION :	100p	820	0.68u	0	-	-	-	0	0	100	220	220	
OVERSEAS VERSION :	-	240	-	-	-	SFE14-3	SFE17-7	-	-	120	47	0	

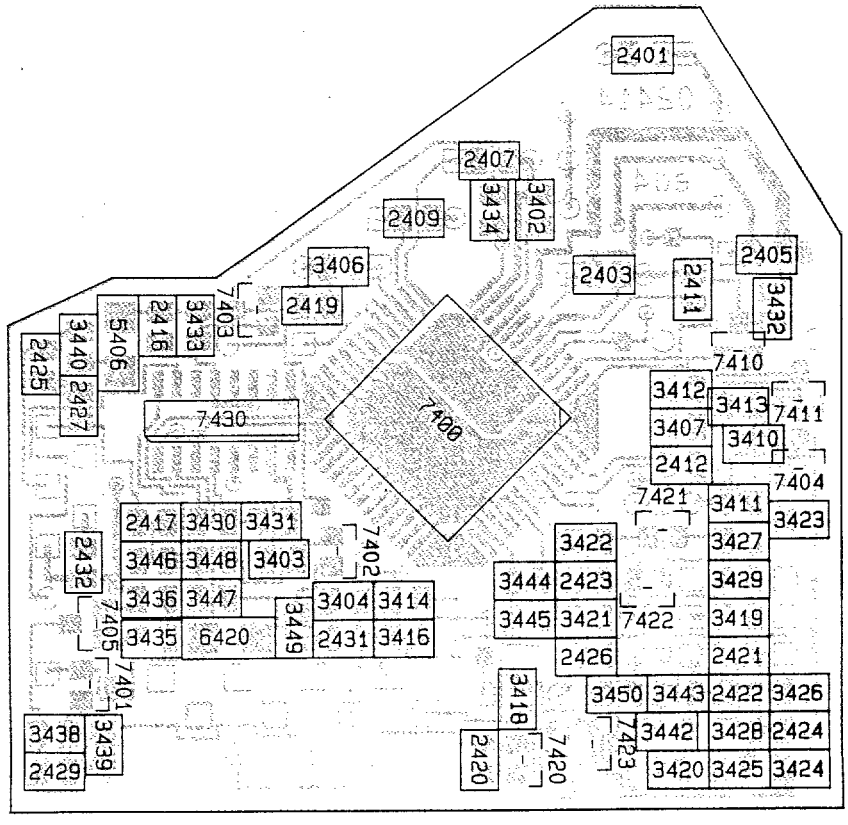


CONNECTOR F38 12 NC NUMBER

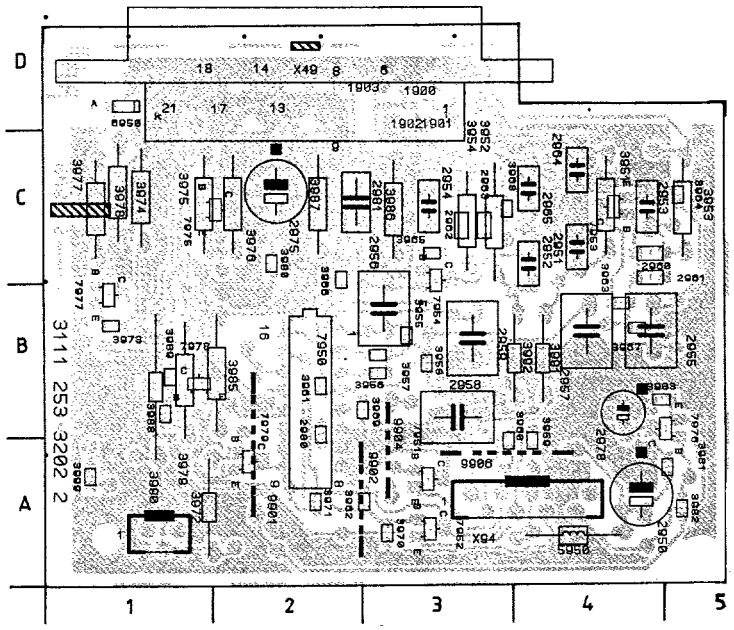
standar ver / overseas ver	
- 6 5 4 3 2 1 -	3111 258 02050
1 2 3 4 5 6 7 8	3111 258 00250

Comb filter module





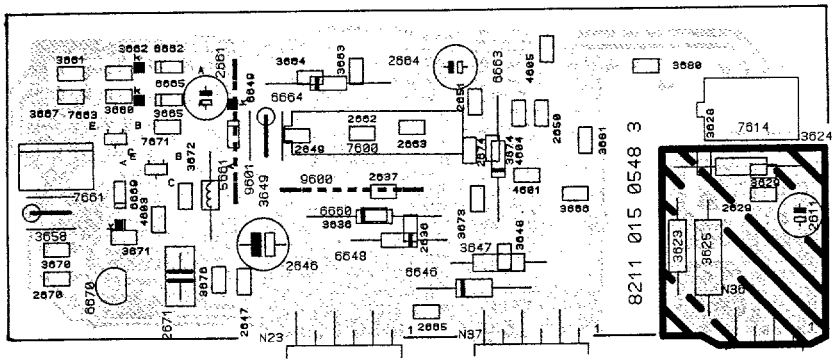
Third scart module 1006



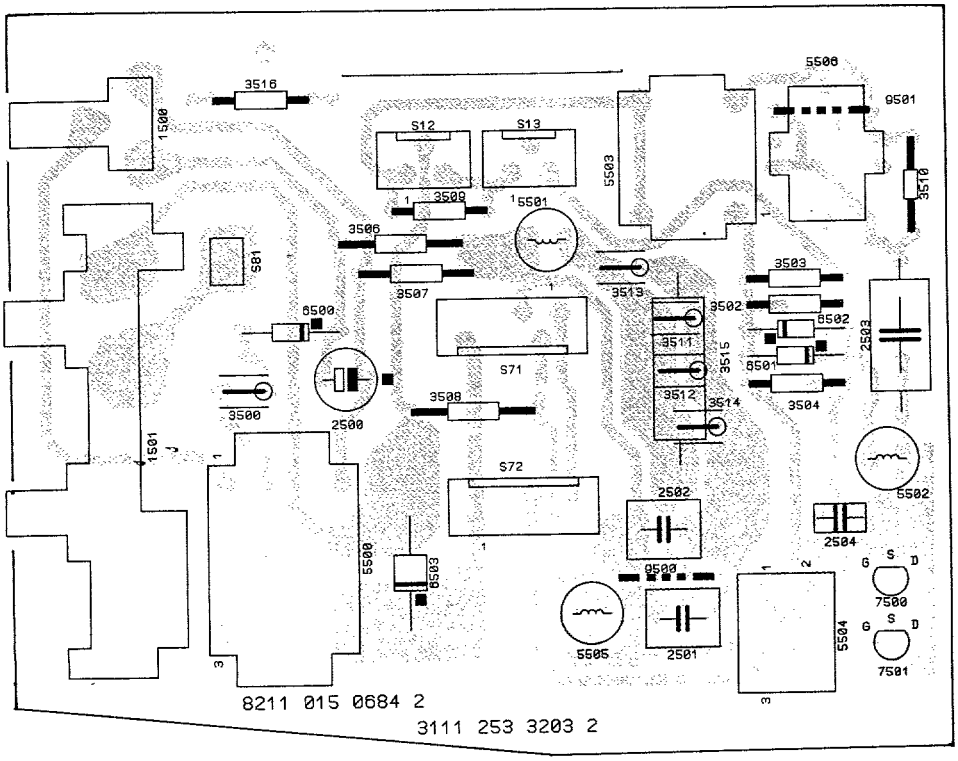
1900 D3	3962 A3	7953 C4
1901 D3	3963 B4	7954 C3
1902 D3	3964 C5	7975 C2
1903 D3	3965 C3	7976 B5
2950 A4	3966 C2	7977 B1
2951 C4	3967 B4	7978 B2
2952 C4	3968 C4	7979 A2
2953 C5	3969 B3	9901 B2
2954 C3	3970 A3	9902 A3
2955 B5	3971 A2	9904 A3
2956 B3	3972 A2	9906 A4
2957 B4	3973 B1	X31 A1
2958 B3	3974 C1	X49 D3
2959 B3	3975 C2	X94 A4
2960 C5	3976 C2	
2961 C5	3977 C1	
2962 C3	3978 C1	
2963 C3	3979 B1	
2964 C4	3980 C2	
2965 C4	3981 A5	
2975 C2	3982 A5	
2978 B4	3983 B5	
2980 B2	3985 B2	
2981 C3	3986 C3	
3951 C4	3987 C2	
3952 C3	3988 B1	
3953 C5	3989 B1	
3954 C3	3990 B1	
3955 B3	3991 B4	
3956 B3	3992 B4	
3957 B3	5950 A4	
3958 B3	6950 D1	
3959 B4	7950 B2	
3960 B4	7951 A3	
3961 B2	7952 A3	

Sops controle module/Scanning module

SOPS CONTROLE MODULE 1007

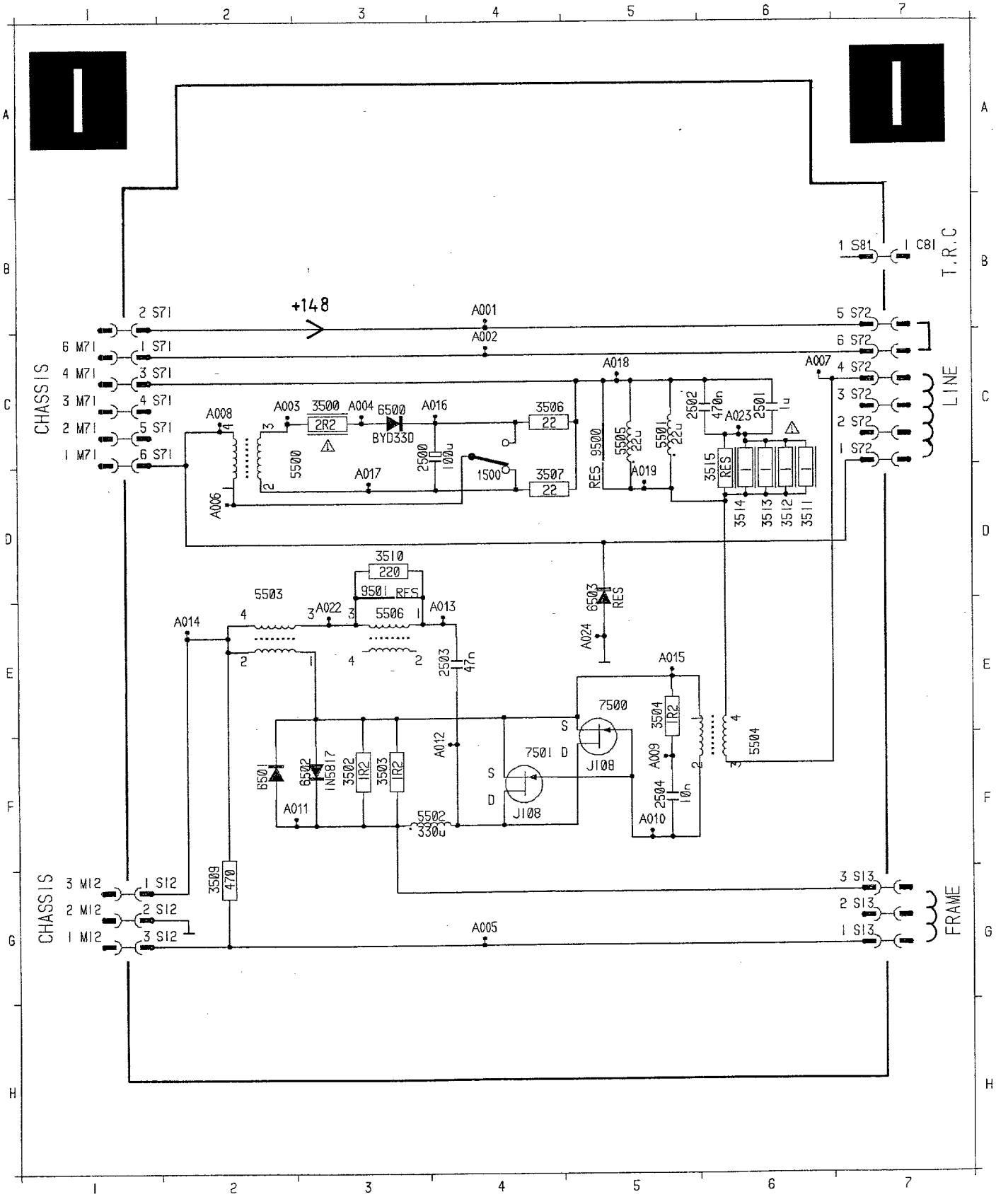


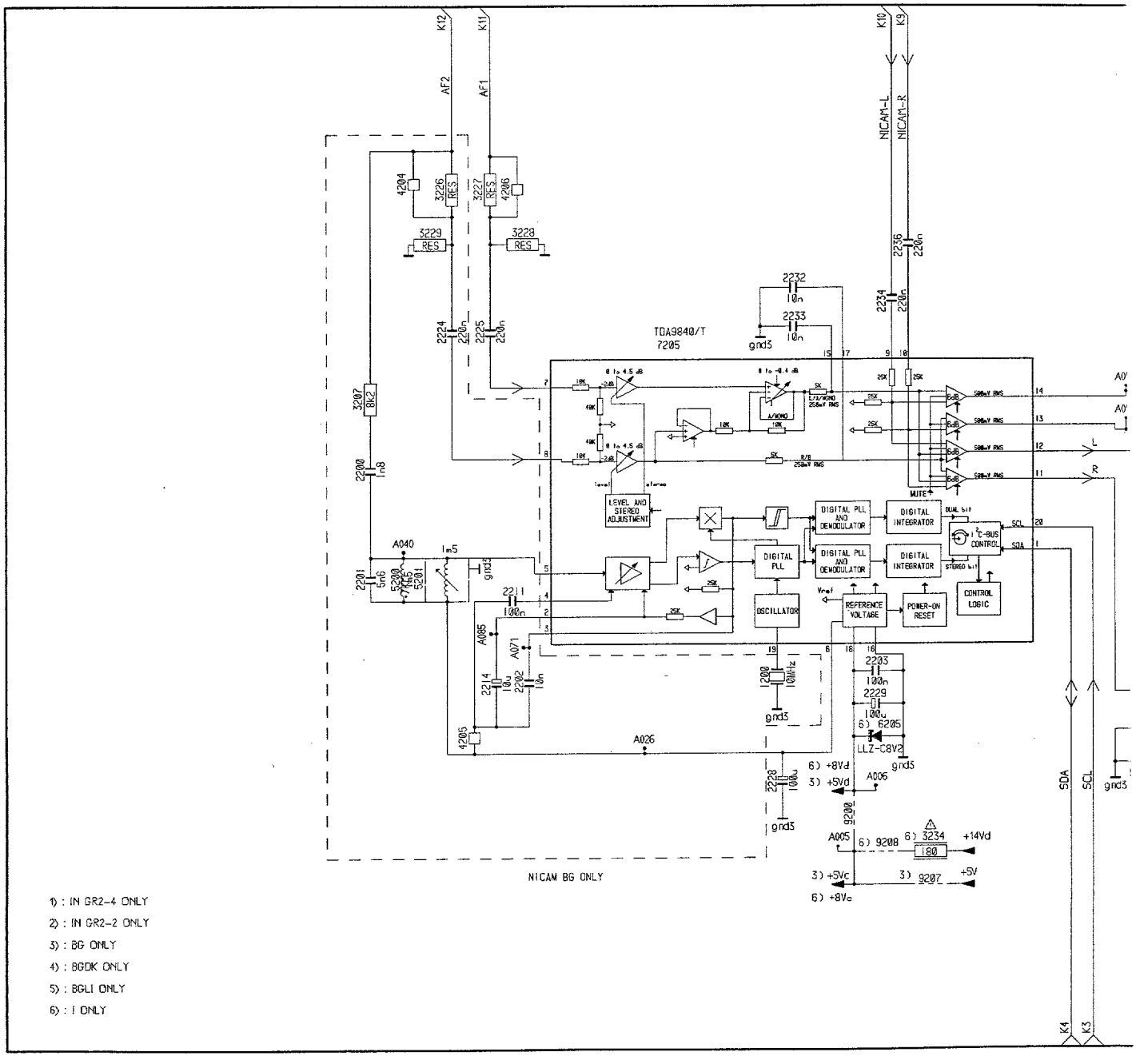
SCANNING MODULE 1009



Scanning module

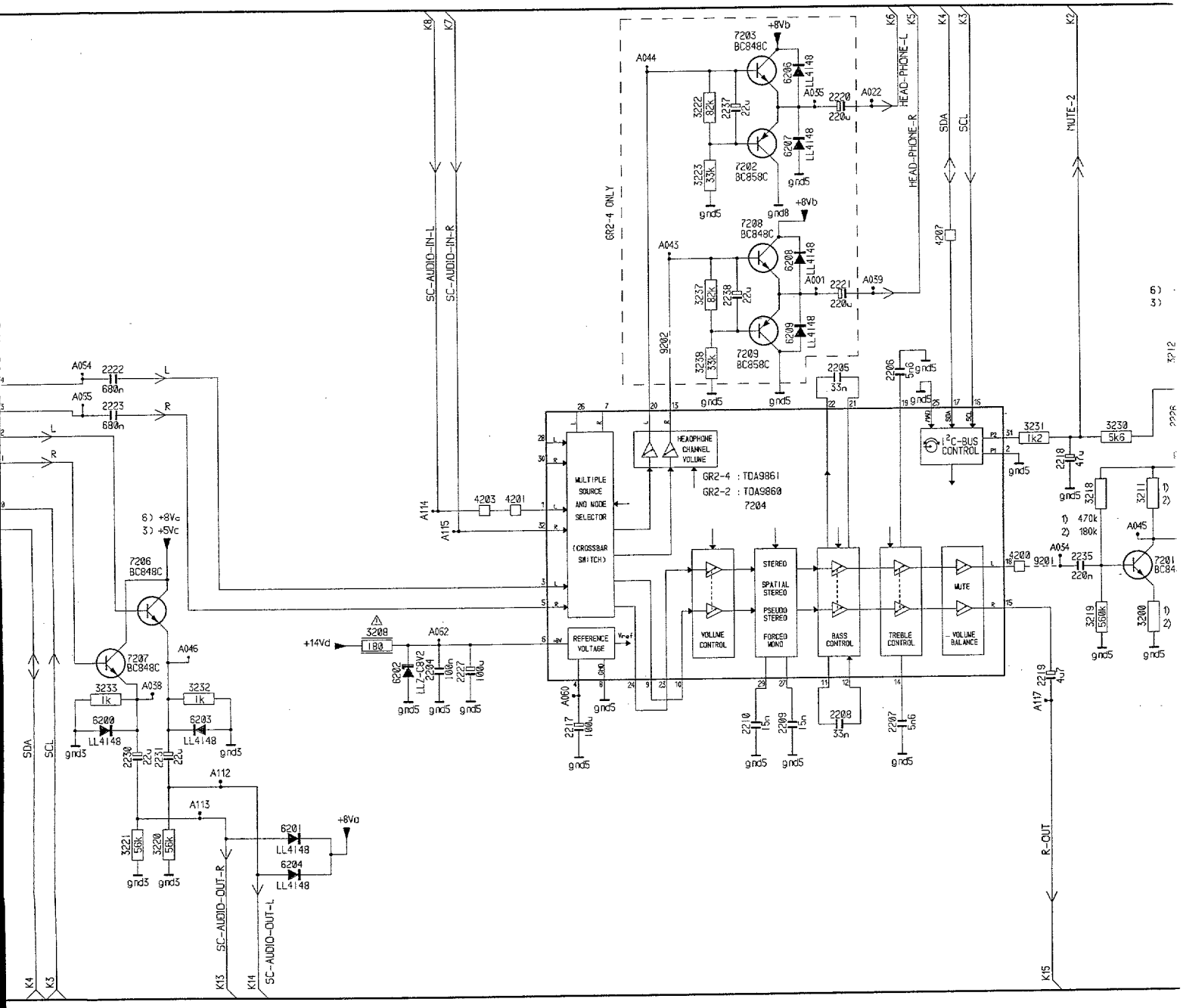
1500	D	4	3503	F	3	3513	D	6	5505	C	5	9501	D	3	A009	F	5	A018	C	5	S12	G	2	S71	C	2	S81	B	7			
1501	A	4	3504	E	5	3514	D	6	5506	E	3	A001	B	4	A010	F	5	A019	D	5	S12	G	2	S71	C	2						
2500	C	3	3506	C	4	3515	D	6	6500	C	3	A002	C	4	A011	F	2	A020	B	3	S12	G	2	S71	C	2						
2501	C	6	3507	D	4	3516	G	4	6501	F	2	A003	C	2	A012	F	4	A021	B	5	S13	G	7	S72	C	7						
2502	C	5	3508	B	3	5500	C	3	6502	E	3	A004	C	3	A013	E	4	A022	E	3	S13	G	7	S72	C	7						
2503	E	4	3509	G	2	5501	C	5	6503	D	5	A005	G	4	A014	E	2	A023	C	6	S13	G	7	S72	C	7						
2504	F	5	3510	D	3	5502	F	4	7500	E	5	A006	D	2	A015	E	5	A024	E	5	S71	C	2	S72	C	7						
3500	C	3	3511	D	6	5503	D	2	7501	F	4	A007	C	6	A016	C	4	A025	G	4	S71	B	2	S72	B	7						
3502	F	3	3512	D	6	5504	F	6	9500	C	5	A008	C	2	A017	D	3	A026	G	3	S71	C	2	S72	C	7						

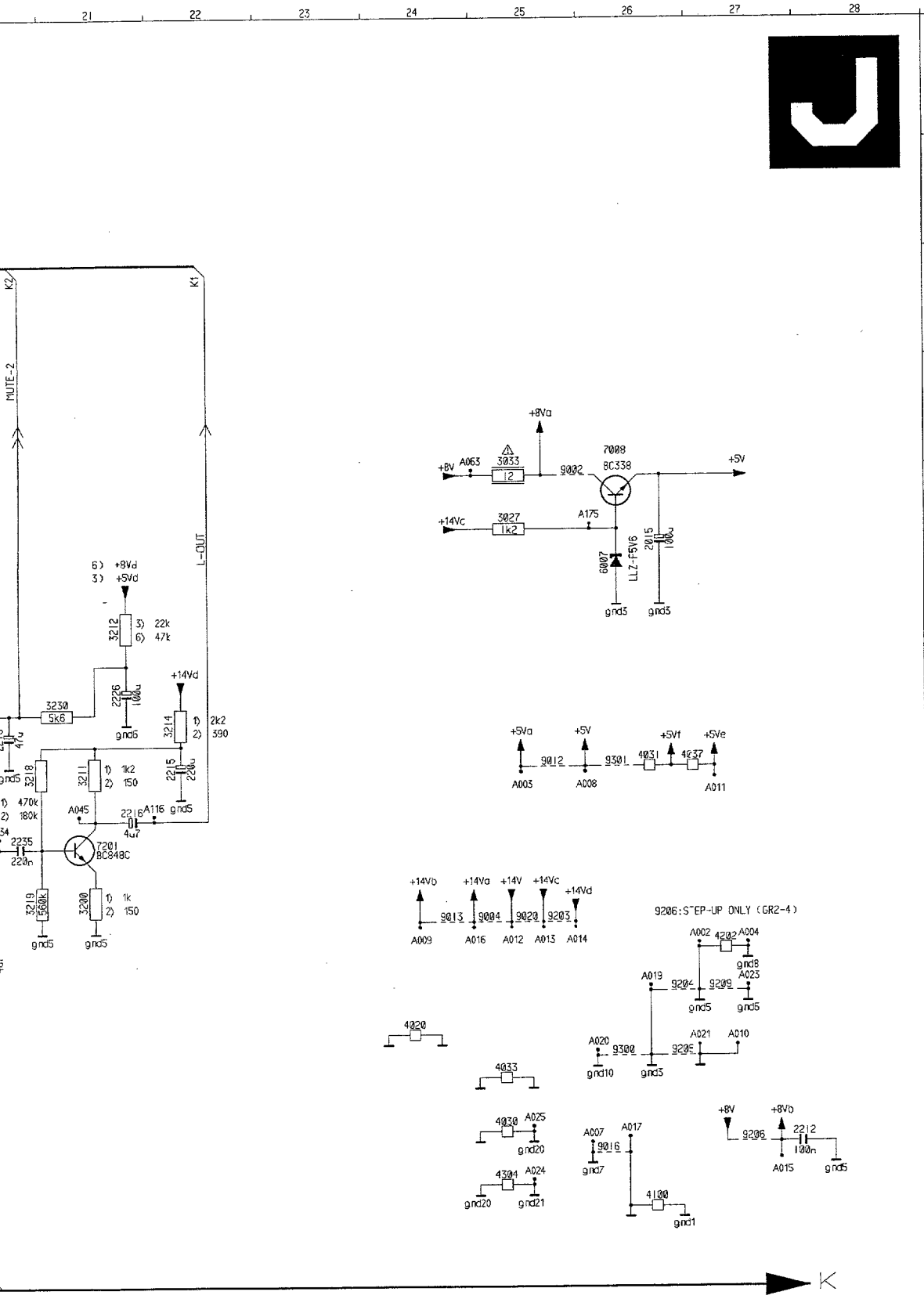




1) : IN GR2-4 ONLY
2) : IN GR2-2 ONLY
3) : BG ONLY
4) : BGDK ONLY
5) : BGLI ONLY
6) : I ONLY

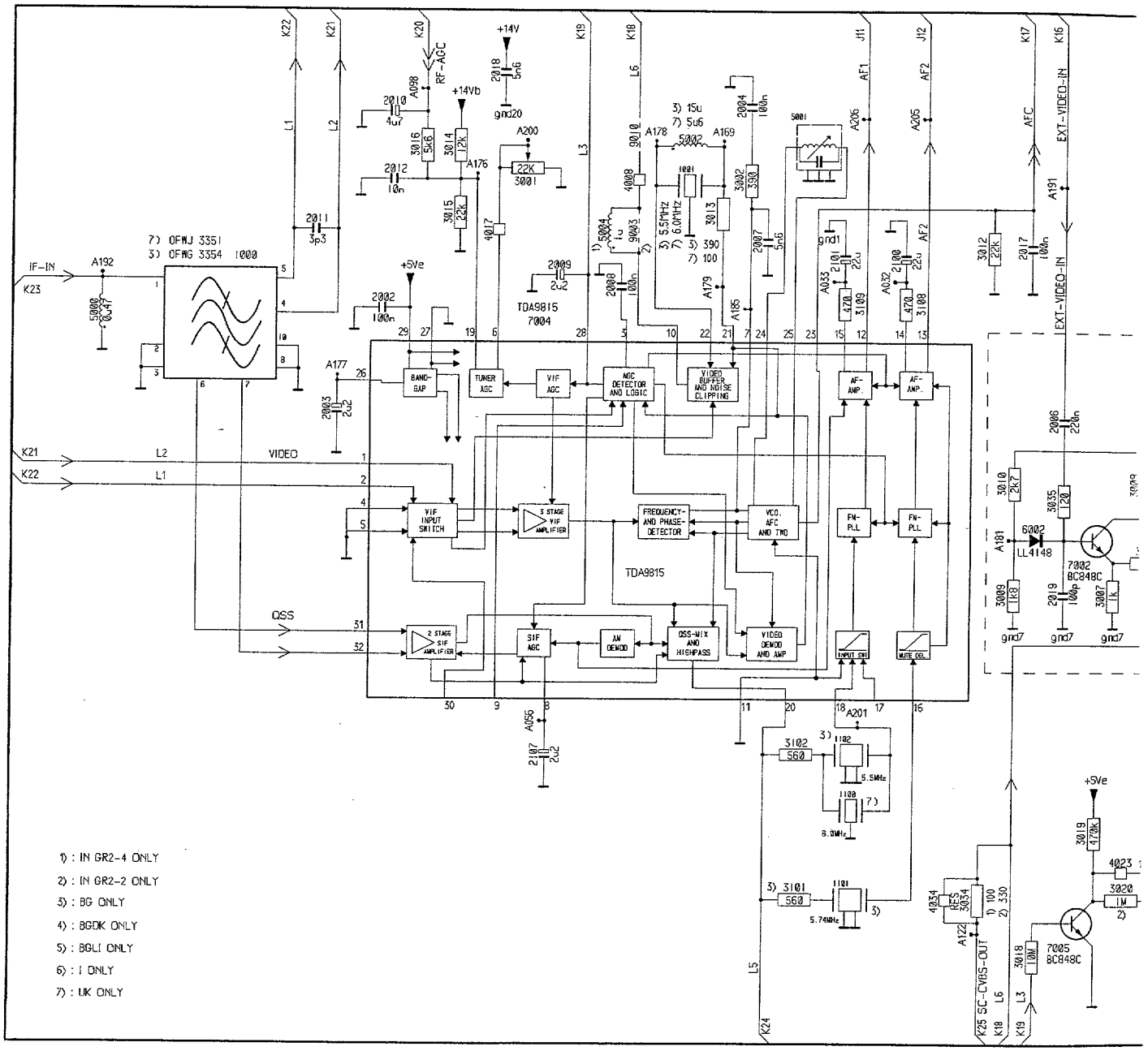
Module FI-Son Nicam

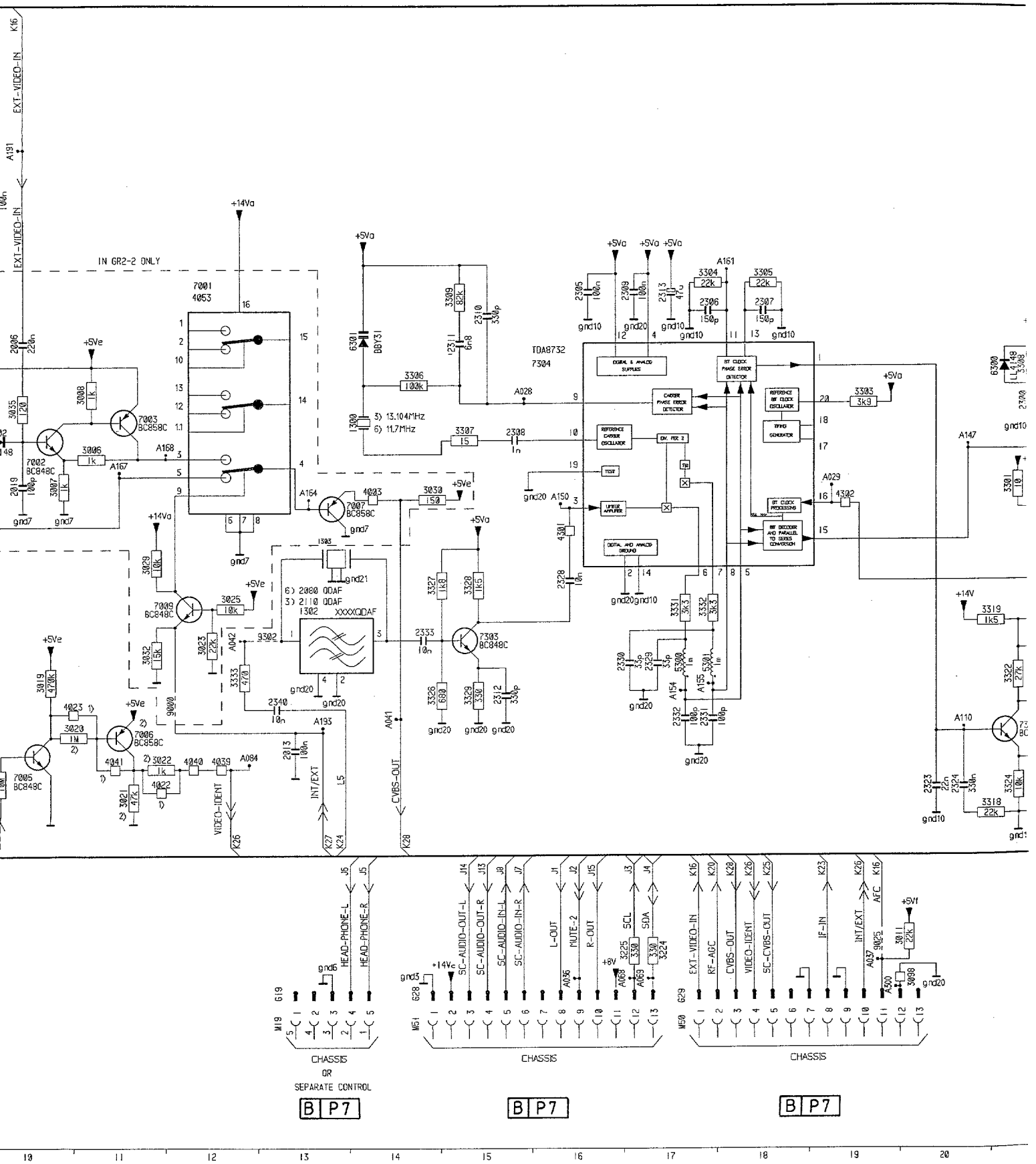


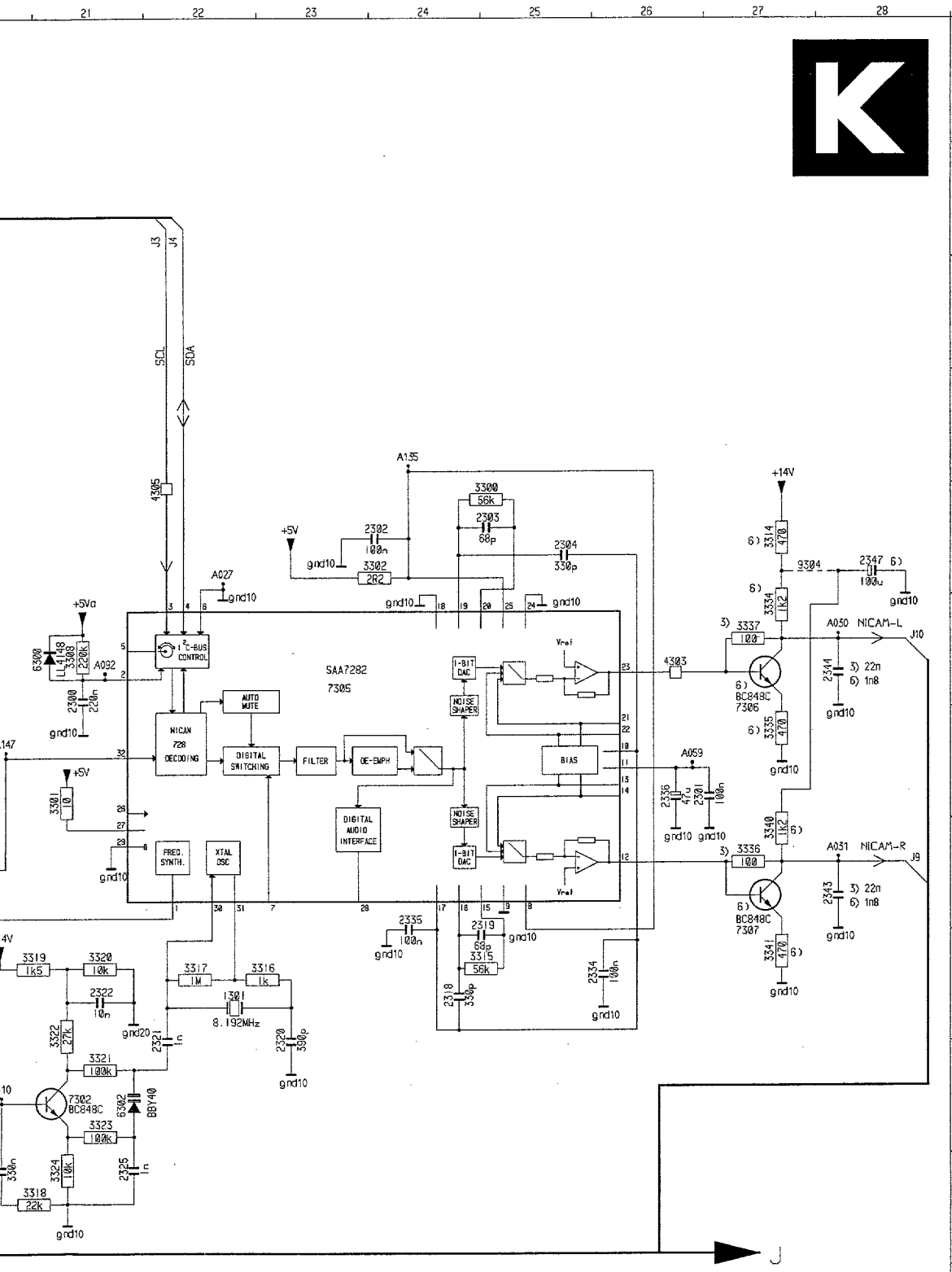


1200	I 7	A043	E16
2015	E26	A044	C16
2200	G 4	A045	H21
2201	H 4	A046	I12
2202	I 5	A054	F11
2203	I 8	A055	F11
2204	I14	A060	I15
2205	F18	A062	I14
2206	F18	A063	D24
2207	J18	A071	H 5
2208	I18	A085	H 5
2209	J17	A112	J12
2210	J17	A113	J12
2211	H 5	A114	G14
2212	K28	A115	H14
2214	I 5	A116	H22
2215	G22	A117	I20
2216	H21	A175	E26
2217	J15		
2218	G20		
2219	I20		
2220	D18		
2221	E18		
2222	F11		
2223	F11		
2224	F 4		
2225	F 5		
2226	G21		
2227	I14		
2228	J 7		
2229	I 8		
2230	J11		
2231	J11		
2232	E 8		
2233	E 8		
2234	E 8		
2235	H20		
2236	E 9		
2237	D17		
2238	E17		
3027	E25		
3033	D25		
3200	I21		
3207	F 4		
3208	I14		
3211	G21		
3212	F21		
3214	G22		
3218	G20		
3219	I20		
3220	K11		
3221	K11		
3222	D17		
3223	D17		
3226	D 4		
3227	D 5		
3228	E 5		
3229	E 4		
3230	G21		
3231	G20		
3232	I12		
3233	I11		
3234	J 9		
3237	E17		
3238	F17		
4020	J24		
4030	K25		
4031	G26		
4033	J25		
4037	G27		
4100	K26		
4200	H20		
4201	G15		
4202	I27		
4203	G15		
4204	D 4		
4205	I 5		
4206	D 5		
4207	E18		
4304	K25		
5200	H 4		
5201	H 4		
6007	E26		
6200	I11		
6201	K13		
6202	I14		
6203	I12		
6204	K13		
6205	I 9		
6206	C18		
6207	D18		
6208	E18		
6209	F18		
7008	D26		
7201	H21		
7202	D17		
7203	C17		
7204	G17		
7205	F 6		
7206	H11		
7207	I11		
7208	E17		
7209	F17		
9002	E25		
9004	I25		
9012	G25		
9013	I24		
9016	K26		
9020	I25		
9200	J 8		
9201	H20		
9202	F16		
9203	I25		
9204	I26		
9205	J26		
9206	K27		
9207	K 9		
9208	J 9		
9209	I27		
9300	J26		
9301	G26		
A001	E18		
A002	I27		
A003	G25		
A004	I27		
A005	J 8		
A006	J 8		
A007	K26		
A008	G26		
A009	I24		
A010	J27		
A011	H27		
A012	I25		
A013	I25		
A014	I25		
A015	K27		
A016	I25		
A017	K26		
A019	I26		
A020	J26		
A021	J27		
A022	C18		
A023	I27		
A024	K25		
A025	K25		
A026	I 6		
A034	H20		
A035	C18		
A038	I11		
A039	E18		
A040	H 4		

Nicam IF-Sound module/Nicam ZF-Ton module



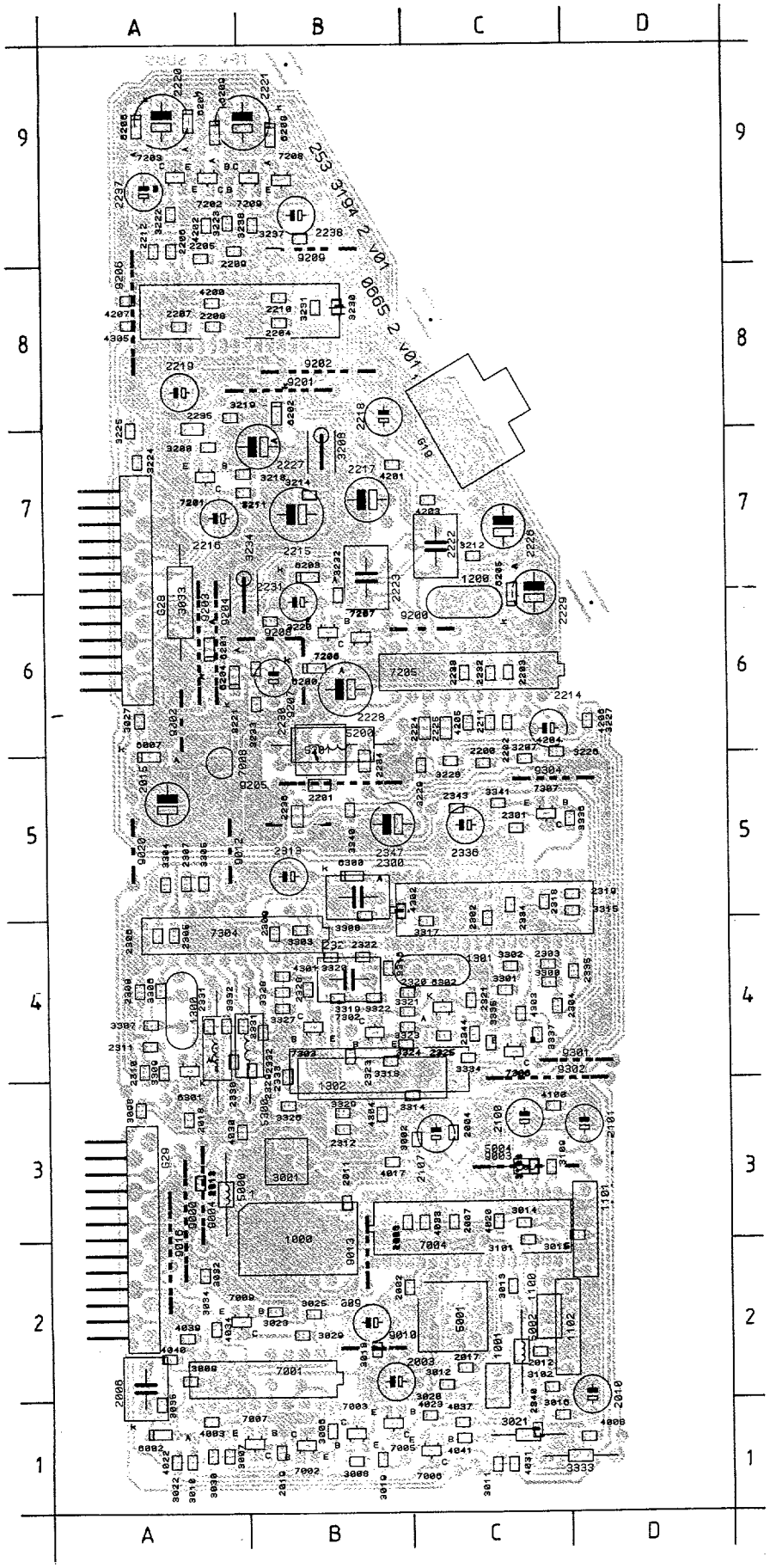

EXT-VIDEO-IN
IN GR2-2 ONLY
+14Va
+5Va
+5Ve
7001
4053
TDA8732
7304
7003
BC858C
7002
BC848C
7009
BC848C
7006
BC858C
7005
BC848C
7303
BC848C
7007
BC858C
6) 13.104MHz
3) 11.7MHz
6) 2080 ODAF
3) 2110 ODAF
1302 XXXXQDAF
VIDEO-IDENT
INT/EXT
CVBS-OUT
HEAD-PHONE-L
HEAD-PHONE-R
SC-AUDIO-OUT-L
SC-AUDIO-OUT-R
SC-AUDIO-IN-L
SC-AUDIO-IN-R
L-OUT
MUTE-2
R-OUT
SCL
SDA
EXT-VIDEO-IN
RF-AGC
CVBS-OUT
VIDEO-IDENT
SC-CVBS-OUT
IF-IN
INT/EXT
AFC
CHASSIS
OR
SEPARATE CONTROL
B P7
B P7
B P7



J

	1000	D 2	7002	G10
	1001	D 6	7003	G11
	1100	I 8	7004	E 5
	1101	J 8	7005	K10
	1102	I 8	7006	J11
	1300	G14	7007	H13
A	1301	I22	7009	I12
	1302	I13	7302	J21
	1303	H13	7303	I15
	2002	E 4	7304	F15
	2003	F 3	7305	F23
	2004	C 7	7306	G27
	2006	F10	7307	I27
	2007	D 7	9000	J12
	2008	E 6	9003	D 6
	2009	D 5	9010	C 6
	2010	C 4	9025	L19
	2011	D 3	9302	I13
B	2012	D 4	9304	E27
	2013	J13	A027	E22
	2017	D10	A028	F15
	2018	C 5	A029	G19
	2019	G10	A030	F28
	2100	D 8	A031	H28
	2101	D 8	A032	E 8
	2107	I 5	A033	E 8
	2300	F21	A039	M16
	2301	G26	A037	M19
C	2302	E24	A041	J14
	2303	E25	A042	I12
	2304	E25	A056	L 5
	2305	E16	A059	G26
	2306	E17	A068	M16
	2307	E18	A069	M17
	2308	G15	A084	J12
	2309	E17	A092	F21
	2310	E15	A098	C 4
	2311	F15	A110	J20
	2312	J15	A122	J 9
D	2313	E17	A135	D24
	2318	I24	A147	G20
	2319	H25	A150	G16
	2320	I23	A154	J17
	2321	I22	A155	J17
	2322	I21	A161	E18
	2323	K20	A164	G13
	2324	K20	A167	G11
	2325	K21	A168	G11
	2328	H16	A169	C 7
	2329	I17	A176	D 5
E	2330	I16	A177	E 3
	2331	J17	A178	C 6
	2332	J17	A179	E 7
	2333	I14	A181	G 9
	2334	I26	A185	E 7
	2335	H24	A191	D10
	2336	G26	A192	D 1
	2340	J13	A193	J13
	2343	H28	A200	C 5
	2344	F28	A201	H 8
F	2347	E28	A205	C 9
	3001	D 5	A206	C 8
	3002	D 7	A300	M19
	3006	G11	G19	M13
	3007	G10	G19	M13
	3008	F11	G19	M13
	3009	G 9	G19	M13
	3010	F 9	G19	M14
	3011	L20	G28	M14
	3012	D 9	G28	M15
	3013	D 7	G28	M15
G	3014	C 4	G28	M15
	3015	D 4	G28	M15
	3016	C 4	G28	M15
	3018	K10	G28	M16
	3019	I10	G28	M16
	3020	J11	G28	M16
	3021	K11	G28	M16
	3022	J11	G28	M16
	3023	I12	G28	M17
	3025	I12	G28	M17
	3029	H11	G29	M17
H	3030	G14	G29	M17
	3032	I11	G29	M18
	3034	J 9	G29	M18
	3035	F10	G29	M18
	3098	M20	G29	M18
	3101	J 8	G29	M18
	3102	I 8	G29	M19
	3108	G 9	G29	M19
	3109	E 8	G29	M19
	3224	L17	G29	M19
I	3225	L17	G29	M19
	3300	E25	G29	M20
	3301	G21		
	3302	E24		
	3303	F19		
	3304	E17		
	3305	E18		
	3306	F14		
	3307	G15		
	3308	F21		
	3309	E15		
J	3314	G27		
	3315	I25		
	3316	I23		
	3317	I22		
	3318	K21		
	3319	I21		
	3320	I21		
	3321	J21		
	3322	I21		
	3323	J21		
	3324	K21		
K	3326	J14		
	3327	H14		
	3328	H15		
	3329	J15		
	3331	I17		
	3332	I17		
	3333	I12		
	3334	F27		
	3335	G27		
	3336	H27		
L	3337	F27		
	3340	H27		
	3341	I27		
	4003	G14		
	4009	D 6		
	4017	D 5		
	4022	K11		
	4023	J10		
	4034	J 9		
	4039	J12		
	4040	J12		
M	4041	J11		
	4301	H16		
	4302	G19		
	4303	F26		
	4305	E22		
	5000	E 1		
	5001	C 7		
	5002	C 7		
	5004	D 6		
	5300	I17		
	5301	I17		
N	6002	G10		
	6300	F20		
	6301	F14		
	6302	J21		
	7001	E12		

Nicam IF module



G28	C7	3015	A3	6007	C5
G29	C3	3016	A1	6200	B6
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1001	A2	3019	B1	6202	B8
1100	A2	3020	A1	6203	B7
1101	A3	3021	A1	6204	C6
1102	A2	3022	C1	6205	A6
1200	A6	3023	B2	6206	C9
1300	C4	3025	B2	6207	C9
1301	A4	3027	C6	6208	B9
1302	B3	3029	B2	6209	C9
1303	B3	3030	C1	6300	B5
2002	B2	3032	C2	6301	C4
2003	B2	3033	C6	6302	A4
2004	A3	3034	C2	7001	C2
2006	C2	3035	C1	7002	B1
2007	A3	3098	C3	7003	B1
2008	B3	3101	A2	7004	A3
2009	B2	3102	A2	7005	B1
2010	A1	3108	A3	7006	A1
2011	B3	3109	A3	7007	C1
2012	A2	3200	C7	7008	C5
2013	C3	3207	A5	7009	C2
2015	C5	3208	B7	7201	C7
2017	A2	3211	C7	7202	C9
2018	C3	3212	A7	7203	C9
2019	B1	3214	B7	7204	C8
2100	A3	3218	C7	7205	A6
2101	A3	3219	C8	7206	B6
2107	A3	3220	B6	7207	B6
2200	A5	3221	C6	7208	B9
2201	B5	3222	C9	7209	C9
2202	A6	3223	C9	7302	B4
2203	A6	3224	C7	7303	B4
2204	B8	3226	A6	7304	C4
2205	C9	3227	A5	7305	A5
2206	C9	3228	A5	7306	A4
2207	C8	3229	B5	7307	A5
2208	C8	3230	B8	9000	C3
2209	C9	3231	B8	9002	C6
2210	B8	3232	B6	9003	A3
2211	A6	3233	C6	9004	C3
2212	C9	3234	C6	9010	B2
2214	A6	3237	B9	9012	C5
2215	B7	3238	C9	9013	B2
2216	C7	3300	A4	9016	C2
2217	B7	3301	A4	9025	A1
2218	B8	3302	A4	9200	B6
2219	C8	3303	B4	9201	B8
2220	C9	3304	C5	9202	B8
2221	C9	3305	C5	9203	C6
2222	A7	3306	C4	9204	C6
2223	B7	3307	C4	9205	B5
2224	A6	3308	B4	9207	B6
2225	A6	3309	C4	9208	B6
2226	A7	3314	B3	9209	B9
2227	C7	3315	A5	9300	B5
2228	B6	3316	B4	9301	A4
2229	A6	3317	A4	9302	A3
2230	B6	3318	B4	9304	A5
2231	B6	3319	B4		
2232	A6	3320	B4		
2233	A6	3321	B4		
2234	B5	3322	B4		
2235	C8	3323	B4		
2236	B5	3324	B4		
2237	C9	3326	B3		
2238	B9	3327	B4		
2300	B5	3328	B4		
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2302	A4	3331	C4		
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2304	A4	3333	A1		
2305	C4	3334	A4		
2306	C4	3335	A4		
2307	C5	3336	A5		
2308	C4	3337	A4		
2309	B4	3340	B5		
2310	C4	3341	A5		
2311	C4	4003	C1		
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2313	B5	4017	B3		
2318	A5	4020	A3		
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2328	B4	4039	C2		
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2332	C4	4200	C8		
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2334	A5	4202	C9		
2335	A4	4203	A7		
2336	A5	4204	A6		
2340	A1	4205	A6		
2343	A5	4206	A6		
2344	A4	4301	B4		
2347	B5	4302	B5		
3001	B3	4303	A4		
3002	B3	4304	B3		
3006	B1	5000	C3		
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3008	B1	5002	A2		
3009	C2	5004	A3		
3010	C1	5200	B6		
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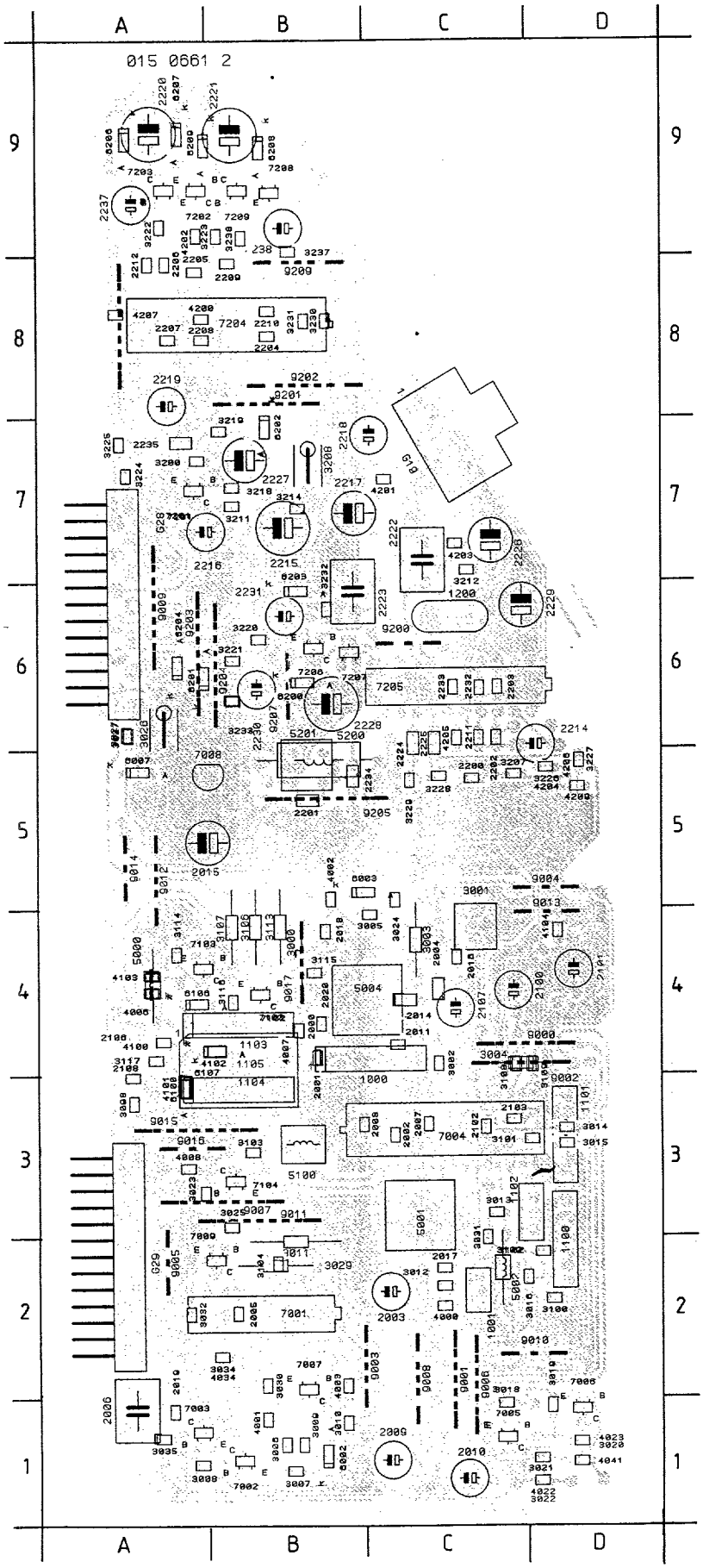
3013	A2	5301	C4		
3014	A3	6002	C1		

Stereo IF module



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1102	B3	3116	C4	9203	D6
1103	C4	3117	D4	9204	D6
1104	C3	3200	D7	9205	C5
1105	C3	3207	B5	9206	D8
1200	B6	3208	C7	9207	C6
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2001	C4	3212	B7	G19	B7
2002	B3	3214	C7	G28	D6
2003	B2	3218	C7	G29	D2
2004	B4	3219	C7		
2005	C2	3220	C6		
2006	D1	3221	C6		
2007	B3	3222	D9		
2008	C3	3223	C9		
2009	B1	3224	D7		
2010	B1	3225	D7		
2011	B4	3226	A5		
2014	B4	3227	A5		
2015	D5	3228	B5		
2016	B4	3229	B5		
2017	B2	3230	C8		
2018	C4	3231	C8		
2019	D1	3232	C6		
2020	C4	3233	C6		
2100	B4	3237	C8		
2101	A4	3238	C9		
2102	B3	4000	B2		
2103	B3	4001	C1		
2106	D4	4002	C4		
2107	B4	4003	C1		
2108	D3	4006	D4		
2200	B5	4007	C4		
2201	C5	4008	D3		
2202	B5	4022	B1		
2203	B6	4023	A1		
2204	C8	4034	D2		
2205	D8	4041	A1		
2206	D8	4100	D4		
2207	D8	4101	D3		
2208	D8	4102	D4		
2209	C8	4103	D4		
2210	C8	4104	A4		
2211	B5	4200	D8		
2212	D8	4201	B7		
2214	B5	4202	D9		
2215	C7	4203	B7		
2216	D7	4204	A5		
2217	C7	4205	B5		
2218	C7	4207	D8		
2219	D8	4209	A5		
2220	D9	5000	D4		
2221	C9	5001	B3		
2222	B7	5002	B2		
2223	C6	5004	C4		
2224	B5	5100	C3		
2225	B5	5200	C5		
2226	B7	5201	C5		
2227	C7	6002	C1		
2228	C6	6003	C5		
2229	B6	6007	D5		
2230	C6	6100	D3		
2231	C6	6106	D4		
2232	B6	6107	D4		
2233	B6	6200	C6		
2234	C5	6201	D6		
2235	D7	6202	C7		
2237	D9	6203	C6		
2238	C9	6204	D6		
3000	C4	6206	D9		
3001	B4	6207	D9		
3002	B3	6208	C9		
3003	B4	6209	D9		
3004	B3	7001	C2		
3005	C4	7002	C1		
3006	C1	7003	D1		
3007	C1	7004	B3		
3008	D1	7005	B1		
3009	C1	7006	A1		
3010	C1	7007	C1		
3011	C2	7008	D5		
3012	B2	7009	D2		
3013	B3	7102	C4		
3014	A3	7103	D4		
3015	A3	7104	C3		
3016	B2	7201	D7		
3018	B1	7202	D9		
3019	A1	7203	D9		
3020	A1	7204	C8		
3021	B1	7205	B6		
3022	B1	7206	C6		
3023	D3	7207	C6		
3024	B4	7208	C9		
3025	C2	7209	C9		
3026	D6	9000	B4		
3027	D6	9001	B2		
3029	C2	9002	B3		
3030	C2	9003	C2		
3031	B2	9004	A5		
3032	D2	9005	D2		
3034	D2	9006	B1		
3035	D1	9007	C3		
3098	D3	9008	B2		
3100	A2	9009	D6		
3101	B3	9010	B2		
3102	B2	9011	C3		
3103	C3	9012	D5		
3104	C2	9013	A4		
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3107	C4	9015	D3		
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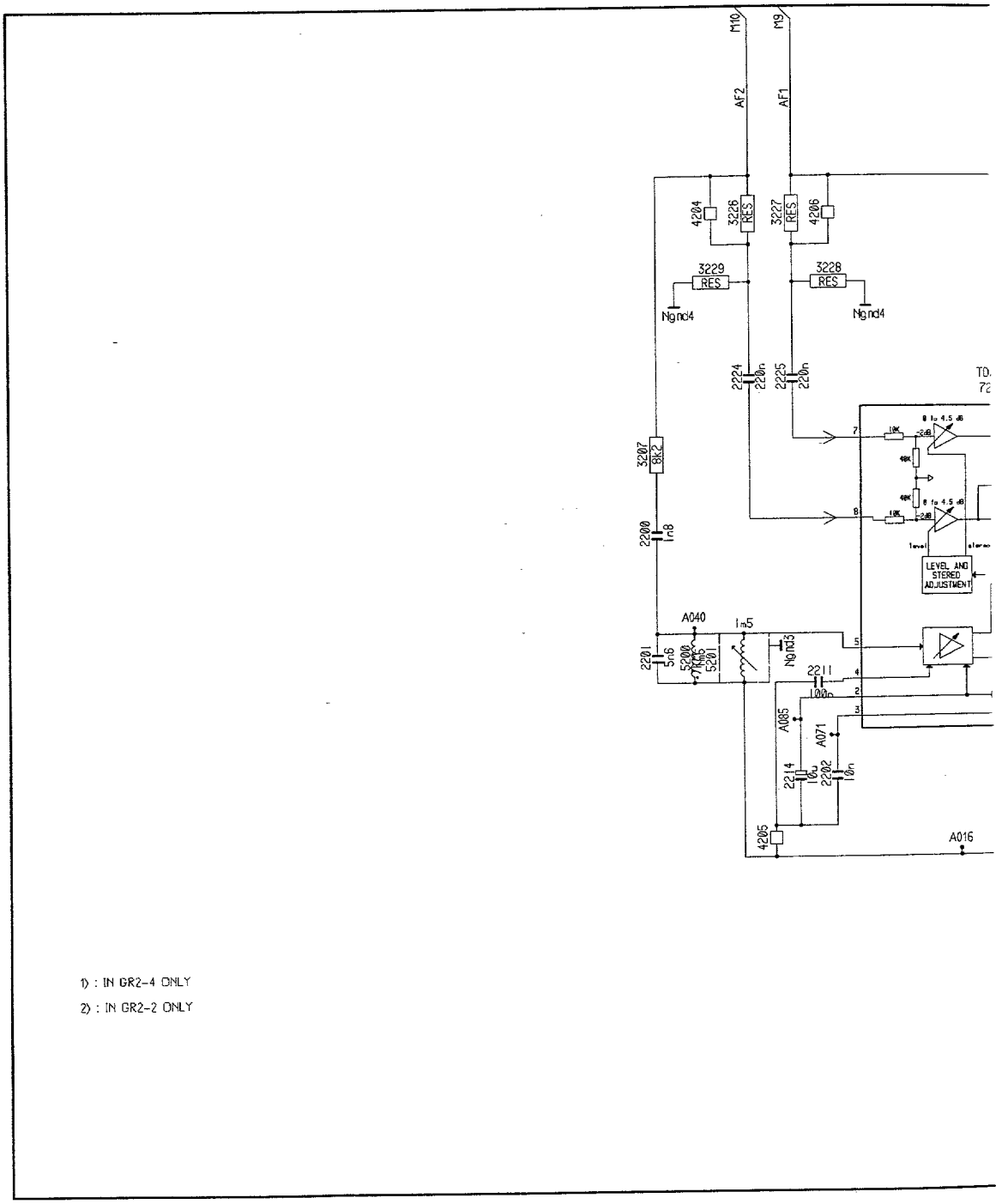
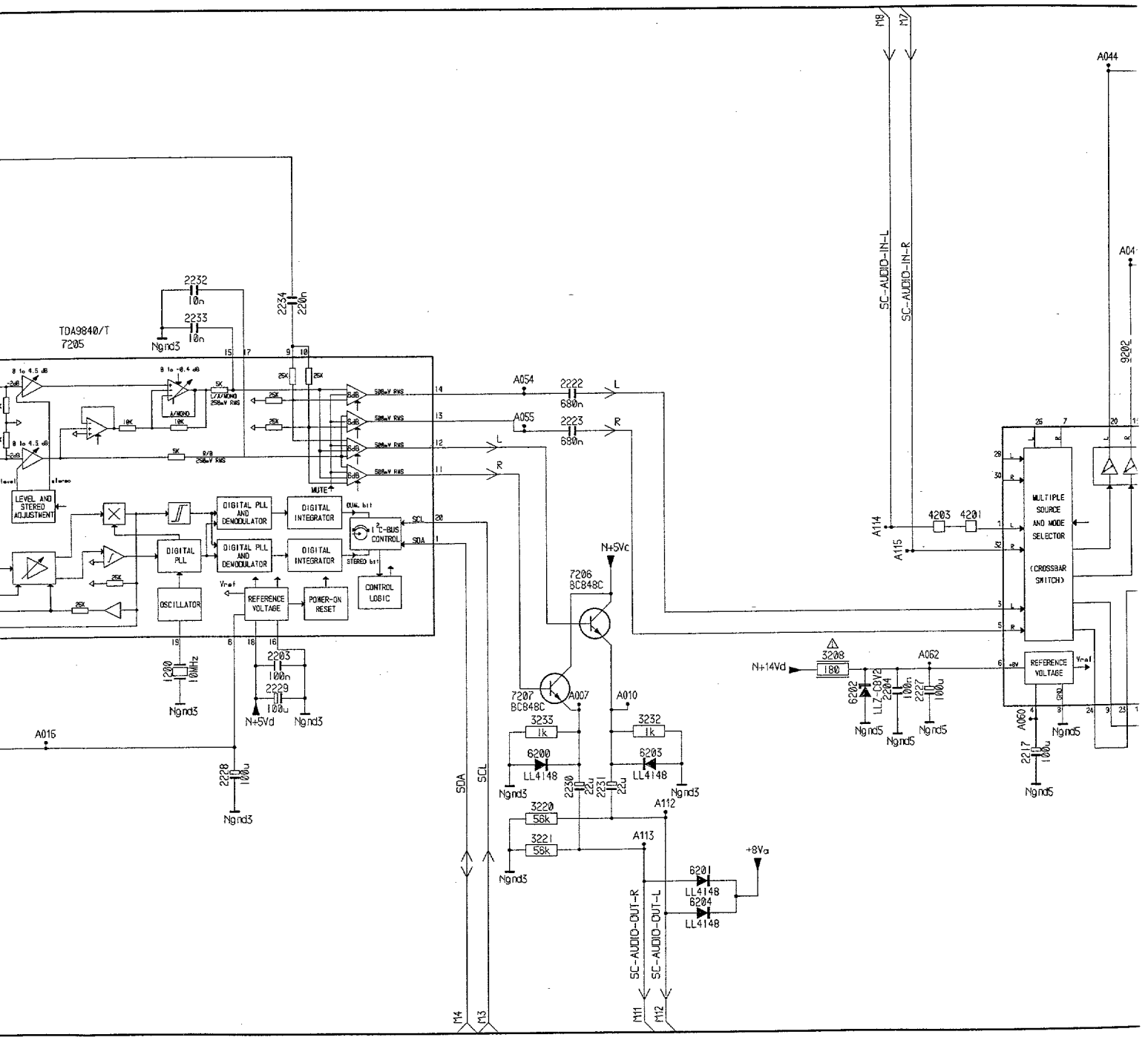
Stereo IF-Sound module/Stereo ZF-Ton module

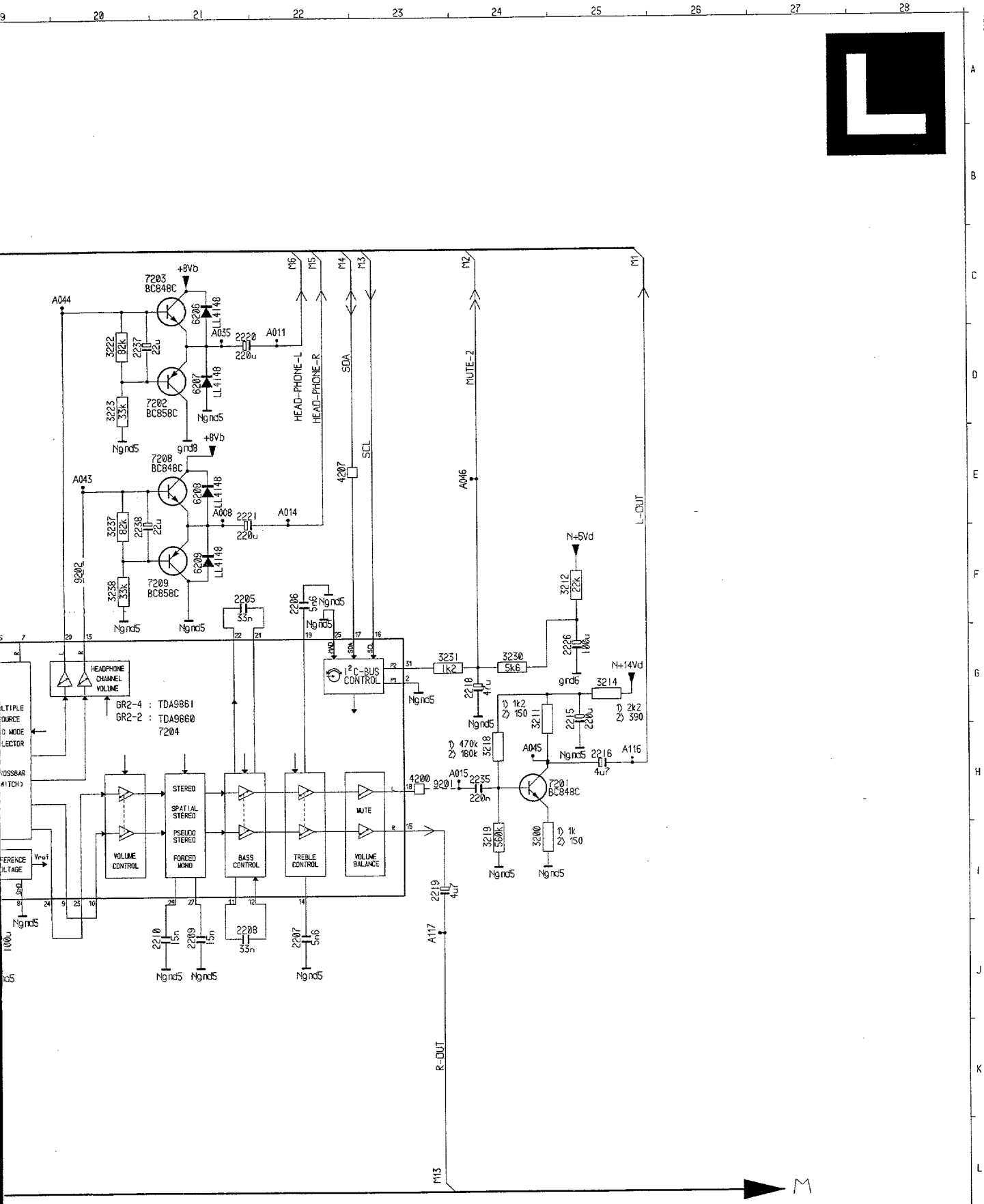


1) : IN GR2-4 ONLY

2) : IN GR2-2 ONLY

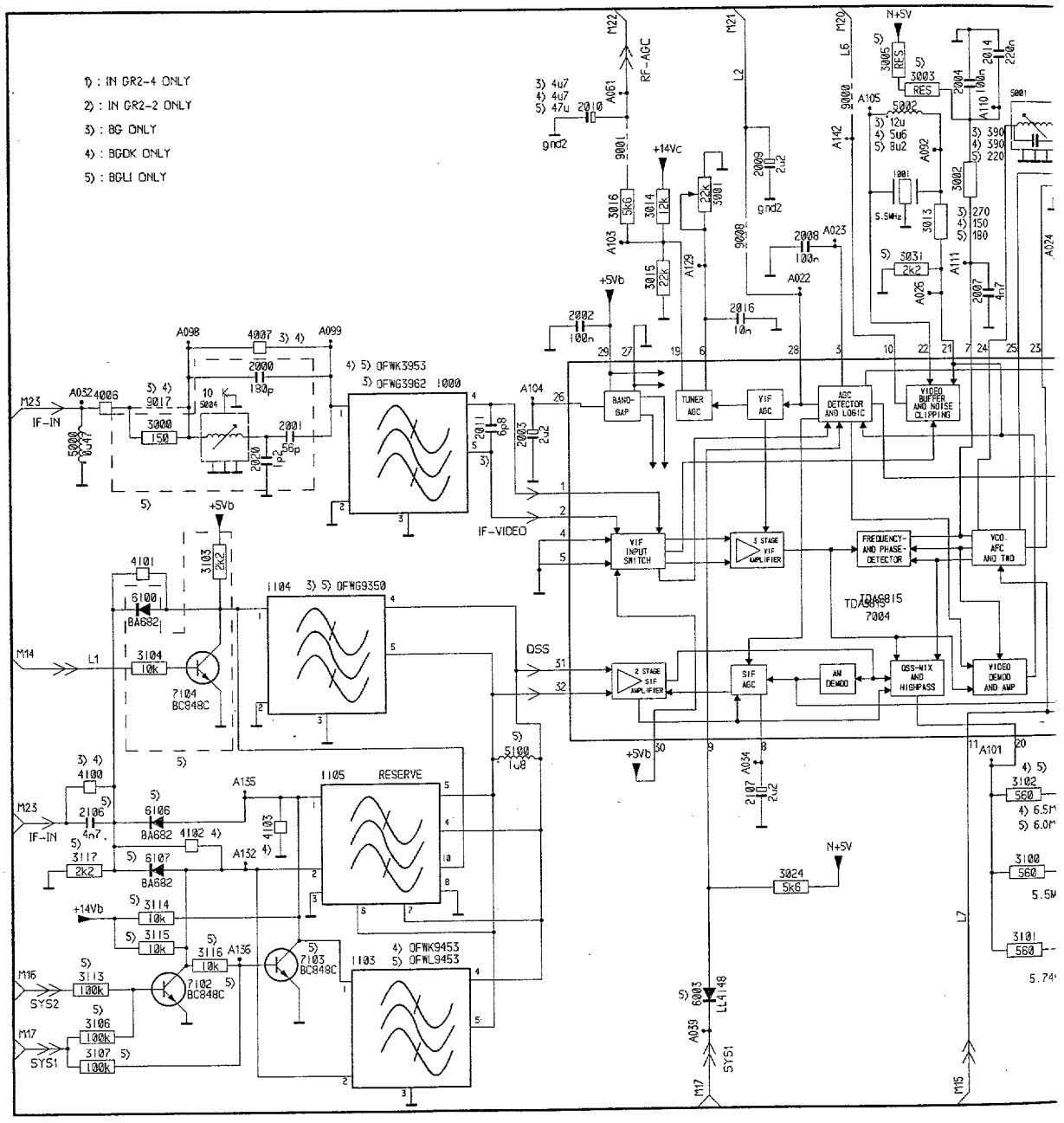
Module FI-Son Stereo

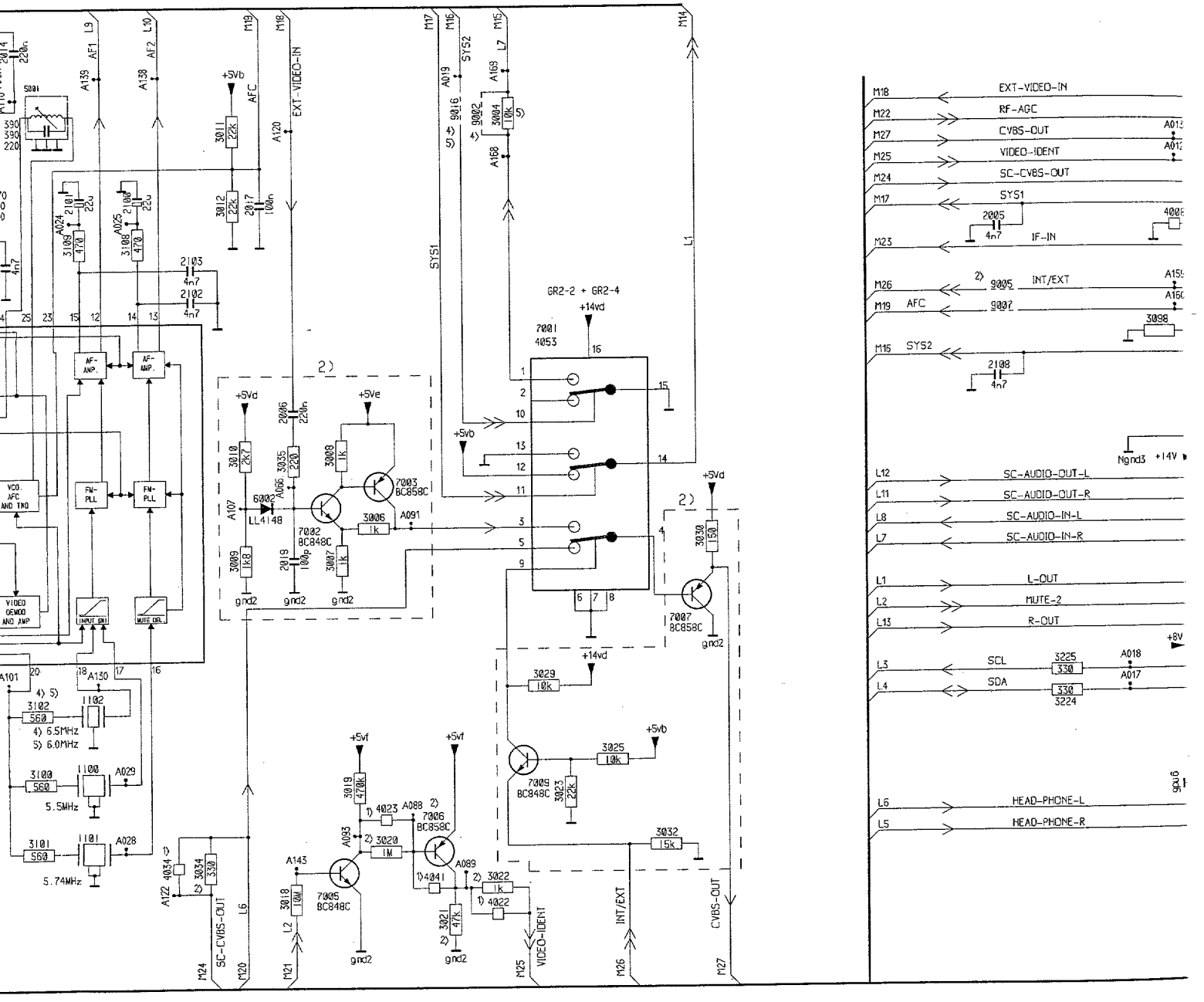


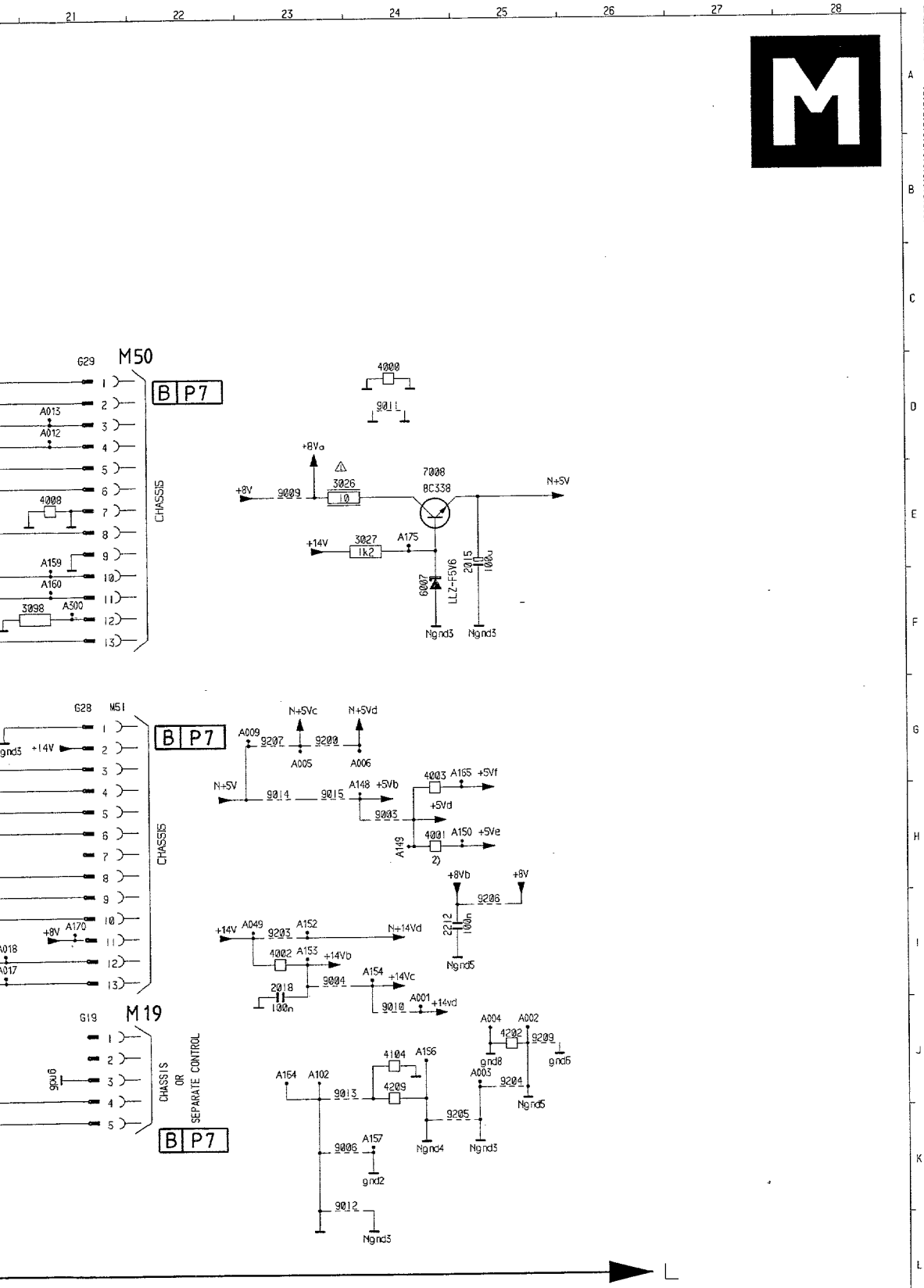

+8Vb
7203 BC848C
7202 BC858C
7208 BC848C
7209 BC858C
LL4148
HEAD-PHONE-L
HEAD-PHONE-R
SDA
SCL
MUTE-2
L-OUT
R-OUT
N+5Vd
N+14Vd
HEADPHONE CHANNEL VOLUME
I²C-BUS CONTROL
GR2-4 : TDA9861
GR2-2 : TDA9860
7204
STEREO
SPATIAL STEREO
PSEUDO STEREO
FORCED MONO
VOLUME CONTROL
BASS CONTROL
TREBLE CONTROL
MUTE
VOLUME BALANCE
7201 BC848C
Ngnd5
gnd6
gnd8

PCS 74 256

Stereo IF-Sound module/Stereo ZF-Ton module




EXT-VIDEO-IN
RF-AGC
CVBS-OUT
VIDEO-IDENT
SC-CVBS-OUT
SYS1
IF-IN
INT/EXT
AFC
SYS2
SC-AUDIO-OUT-L
SC-AUDIO-OUT-R
SC-AUDIO-IN-L
SC-AUDIO-IN-R
L-OUT
MUTE-2
R-OUT
SCL
SDA
HEAD-PHONE-L
HEAD-PHONE-R
GR2-2 + GR2-4
+14vd
+5Vb
+5Vd
+5Ve
+5Vf
+8V
+14V
Ngnd3
gnd2
AF-AMP.
FM-PLL
VCO, AFC AND TRG
VIDEO DEMOD AND AMP
INPUT SW
MUTE DEL
7001 4053
7002 BC848C
7003 BC858C
7005 BC848C
7006 BC858C
7007 BC858C
7009 BC848C
LL4148
5.5MHz
5.74MHz
4) 6.5MHz
5) 6.0MHz



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	1001	D 9	A002	J25
	1100	J10	A003	J25
	1101	K10	A004	J25
	1102	I10	A005	G23
	1103	K 4	A006	G24
A	1104	H 4	A009	G23
	1105	I 4	A012	D21
	2000	F 4	A013	D21
	2001	F 4	A017	I20
	2002	E 6	A018	I20
	2003	F 6	A019	D14
	2004	C 9	A022	E 8
	2005	E19	A023	E 8
	2006	G12	A024	E10
	2007	E10	A025	E11
	2008	E 8	A026	E 9
B	2009	D 8	A028	K11
	2010	D 6	A029	J11
	2011	F 5	A032	F 2
	2014	C10	A034	I 8
	2015	E25	A039	K 7
	2016	E 8	A049	I23
	2017	E12	A061	C 7
	2018	I23	A066	G12
	2019	H12	A088	J13
	2020	G 4	A089	K14
	2100	E11	A091	H13
C	2101	E10	A092	D 9
	2102	E11	A093	K13
	2103	E11	A098	E 3
	2106	J 2	A099	E 4
	2107	I 8	A101	I10
	2108	F19	A102	J23
	2212	I24	A103	E 7
	3000	F 3	A104	F 6
	3001	D 7	A105	D 9
	3002	D 9	A107	H12
	3003	C 9	A110	D10
D	3004	D14	A111	E 9
	3005	C 9	A120	D12
	3006	H13	A122	K11
	3007	H13	A129	E 7
	3008	G13	A130	I11
	3009	H12	A132	J 3
	3010	G12	A135	I 3
	3011	D12	A136	K 3
	3012	E12	A138	C11
	3013	E 9	A139	C10
	3014	D 7	A142	D 8
E	3015	E 7	A143	K12
	3016	D 7	A148	G24
	3018	K12	A149	H24
	3019	J13	A150	H25
	3020	K13	A152	I23
	3021	K14	A153	I23
	3022	K14	A154	I24
	3023	J15	A156	J24
	3024	J 8	A157	K24
	3025	J15	A159	E21
F	3026	E23	A160	F21
	3027	E24	A164	J23
	3029	I15	A165	G25
	3030	H16	A168	D14
	3031	E 9	A169	C14
	3032	K16	A170	I21
	3034	K12	A175	E24
	3035	G12	A300	F21
	3098	F21	G19	J21
	3100	J10	G19	K21
	3101	K10	G19	J21
G	3102	I10	G19	J21
	3103	G 3	G19	J21
	3104	H 3	G28	G21
	3106	K 2	G28	I21
	3107	L 2	G28	H21
	3108	E11	G28	H21
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	3114	J 3	G28	H21
	3115	K 3	G28	G21
	3116	K 3	G28	G21
H	3117	J 2	G28	G21
	3224	I20	G28	I21
	3225	I20	G28	I21
	4000	D24	G28	I21
	4001	H24	G29	D21
	4002	I23	G29	F21
	4003	G24	G29	F21
	4006	F 2	G29	F21
	4007	F 4	G29	E21
	4008	E21	G29	E21
I	4022	K14	G29	E21
	4023	J13	G29	E21
	4034	K11	G29	E21
	4041	K14	G29	D21
	4100	I 2	G29	D21
	4101	G 3	G29	D21
	4102	J 3	G29	D21
	4103	J 4		
	4104	J24		
	4202	J25		
	4209	J24		
J	5000	F 2		
	5001	D10		
	5002	D 9		
	5004	F 3		
	5100	I 6		
	6002	G12		
	6003	K 7		
	6007	F24		
	6100	H 3		
	6106	J 3		
	6107	J 3		
K	7001	F15		
	7002	H12		
	7003	G13		
	7004	H 9		
	7005	K13		
	7006	J14		
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L	7103	K 4		
	7104	I 3		
	9000	D 9		
	9001	D 7		
	9002	D14		
	9003	H24		
	9004	I23		
	9005	E19		
	9006	K23		
	9007	F19		
	9008	E 8		
M	9009	E23		
	9010	J24		
	9011	D24		
	9012	K23		
	9013	J23		
	9014	H23		
	9015	H23		
	9016	D14		
	9017	F 3		
	9200	G23		
	9203	I23		
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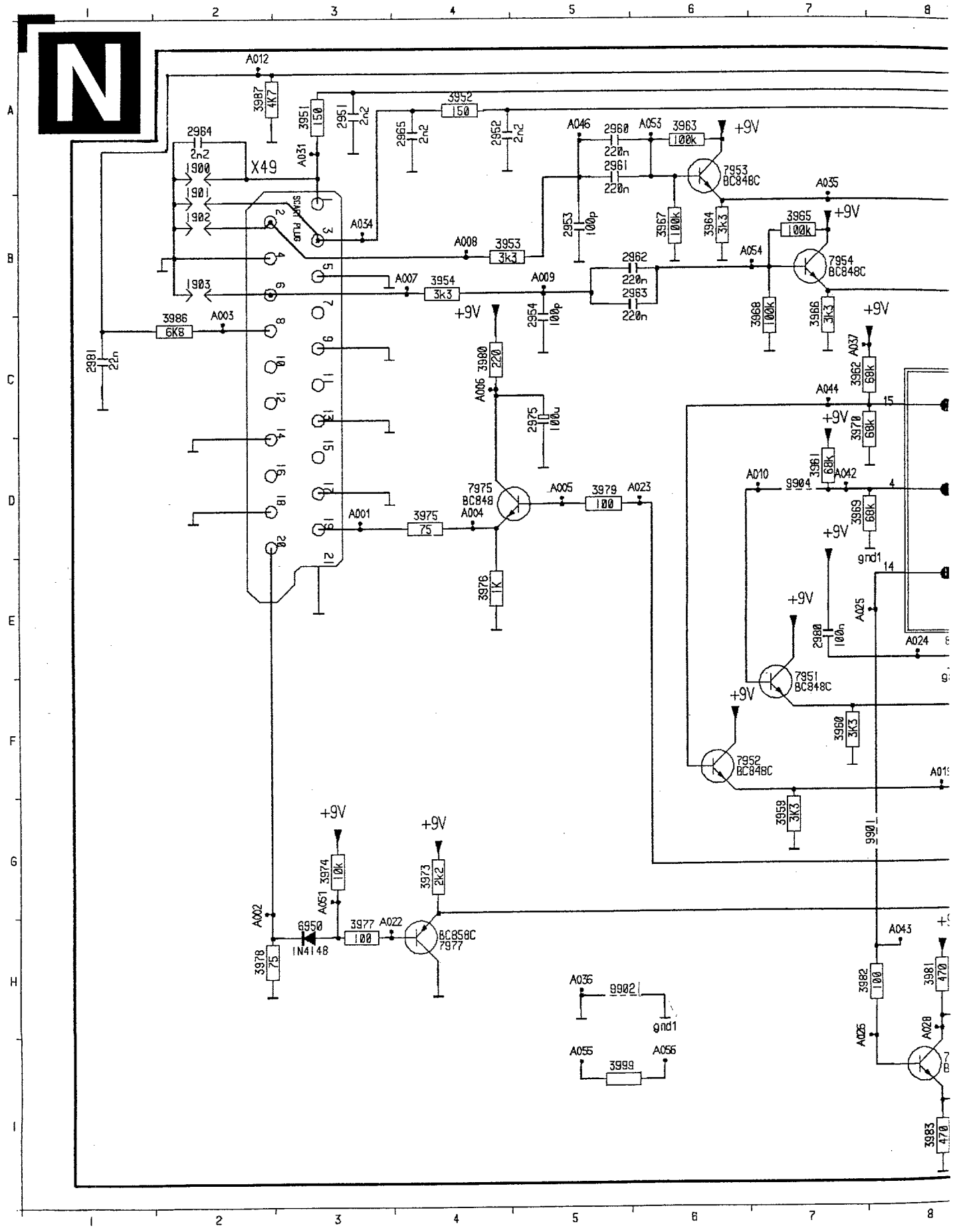
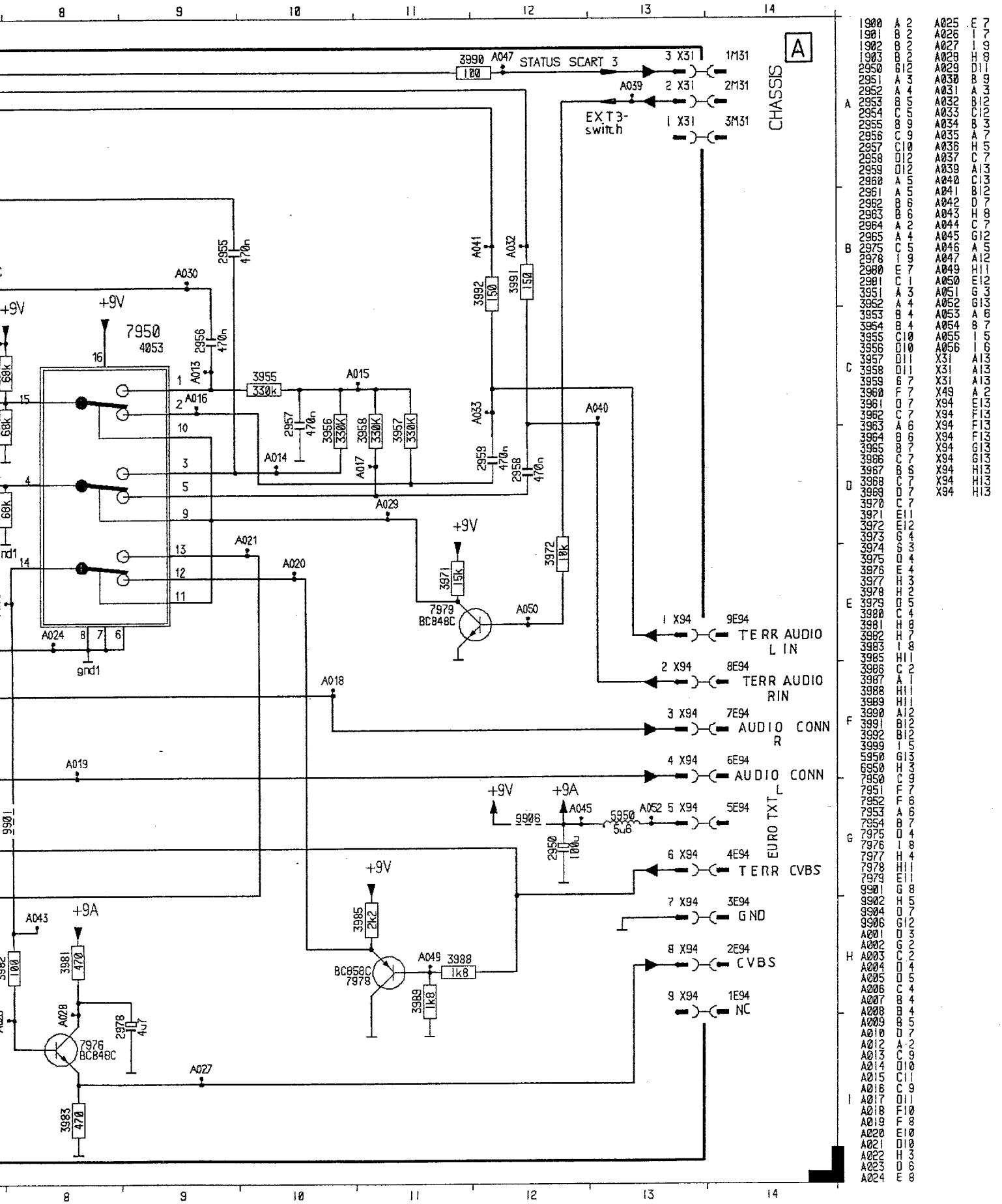
	9205	K24		
	9206	I25		
	9207	G23		
	9209	J25		

Third scart module

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CHASSIS
3990 A047 STATUS SCART 3
3 X31 1M31
A039
2 X31 2M31
EXT3-switch
1 X31 3M31
+9V
7950
4053
16
1
2
10
3
5
9
13
12
11
14
4
15
A013
A016
A014
A017
A029
A030
A015
A021
A020
A018
A019
A024
gnd1
3955 330k
2957 470n
3956 330K
3958 330K
3957 330K
2955 470n
2956 470n
2959 470n
2958 470n
A041
A032
3992 150
3991 150
A033
A040
3971 15k
3972 10k
7979 BC848C
A050
1 X94 9E94 TERR AUDIO L IN
2 X94 8E94 TERR AUDIO RIN
3 X94 7E94 AUDIO CONN R
4 X94 6E94 AUDIO CONN L
EURO TXT
5 X94 5E94
6 X94 4E94 TERR CVBS
7 X94 3E94 GND
8 X94 2E94 CVBS
9 X94 1E94 NC
+9A
A045
A052
9906
5950 5u6
2950 100u
A043
3982 100
3981 470
A028
2978 4u7
7976 BC848C
3983 470
A027
3985 2k2
BC858C 7978
A049
3988 1k8
3989 1k8

7. Electrical adjustments

Setting conditions

All electrical settings should be made under the following conditions:

* supply voltage: 220 - 240 V ± 10%; 50 Hz ± 5%
* warming-up time ≈ 10 minutes
* the voltages and oscillograms have been measured with regard to tuner earth.
* measuring probe: Ri > 10 MΩ; Ci < 2.5 pF.

1. Settings on the carrier board

1.1 +148V/+95V supply voltage

Connect a voltmeter over C2631. Using R3635, set the supply voltage to +148V ± 0.5V for 25" and 28" units or to 95V ± 0.5V for 21" units.

1.2 Focusing

This is set using the focusing potentiometer (on the top of the line output transformer).

1.3 Vg2 setting

Connect a pattern generator and supply a blanking frame signal (black picture). Switch the unit to the service default mode (see section 9).
Connect an oscilloscope to the emitters of transistors 7304 and 7364 on the picture tube module. Set the oscilloscope to frame frequency. Measure the DC voltage level of the measuring pulses (see Fig. 7.2).
Using the Vg2 potentiometer on the line output transformer, set the measuring pulse with the lowest DC voltage level to:

* +130V ± 5V for all sets.

1.4 Horizontal synchronization

Connect pin 5-IC7470 to pin 9-IC7470.
Supply an aerial signal and tune the set.
Adjust in service menu(see section 9), sync.freq.by means of the menu +/- button until the picture is straight. Remove the interconnection.

1.5 Horizontal centring

Set using potentiometer 3461.

1.6 Vertical centring

Set using potentiometer 3516.

1.7 Picture height

Set using potentiometer 3504.

1.8 Picture width

Set using potentiometer 3525.

1.9 East/west correction

Is adjusted with potentiometer 3521

1.10 Chroma bandpass filter

a. Setting for PAL/SECAM sets (TDA4657)

Connect a signal generator (e.g. PM 5138) to pin 20 of the euroconnector (EXT1) and set its frequency to 4.286 MHz/0.5 Vpp. Switch the unit to EXT1.
Connect pin 18-IC7306 to +12V. Connect an oscilloscope to pin 9-IC7306.
Set 5301 to maximum amplitude.
Remove the interconnection.

b. Setting for PAL sets (TDA4510)

Connect a signal generator (e.g. PM 5138) to pin 20 of the euroconnector (EXT1) and set its frequency to 4.436 MHz/0.5Vpp. Connect the unit to EXT1.
Connect an oscilloscope to pin 9-IC7305 (TDA4510).
Set 5301 to maximum amplitude

1.11 Chroma auxiliary oscillator

Connect a pattern generator and supply a PAL colour bar pattern. Connect pin 11-IC7305 (TDA4510) to earth.
Set 2313 so that the colour on the screen has practically stopped. Remove the interconnection.

1.12 White balance

Connect a pattern generator and select a white picture.
Switch on the service menu (see section 9) and select "WHITE BALANCE".
Set the value of "Green" to 50(G/AMP), and the Value of "Blue" to 45(B/AMP). Value of "Red" to 57(R/AMP).
In most cases no futher adjustments are required.

1.13 Peak white limiter

Switch on the service menu (see section 9) and select "WHITE BALANCE".
Set "WH/LIM" to the value:

- 35 for blackline units
- 51 for non-blackline units
- 63 for 21" 110 degree sets.
- 45 for 29" sets

1.14 Cut-off points of the picture tube

Connect a pattern generator and select a black picture.
Switch on the service menu (see section 9) and select "CUT OFF".
Set the value of "Red" to 30, and fore "Green" to 30, and for "Blue" to 30. In most cases no futher adjustments are required.

1.15 Options

Switch on the service menu and select "OPTIONS" or "OPTION 1".
Switch the options "ON" and "OFF" according to whether the following options are present:

- "THIRD SCART" on a set with third scart.
- "TELETEXT" on a teletext set
- "MULTI SYSTEM" for multisystem sets
- "UHF ONLY" for a tuner which can only be tuned to the UHF band
- "NICAM" for stereo sets which can also receive NICAM sound.

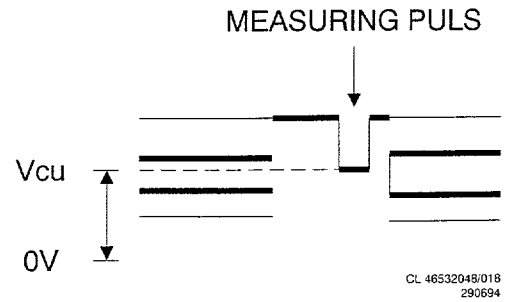


Fig. 7.2

2.1 RF-AGC
If the picture from a strong local transmitter is distorted, adjust 3016 until the picture is not distorted.

2.2a MF-AFC For multi system sets (PAL-BG/SECAM-DK).
Connect a pattern generator to pin 8 of connector G29 (IF-module) and select a frequency of 38,9 MHz. Connect a voltmeter to pin 11 of connector G29.
Adjust with 5001 the DC voltage to 1.9 V.

2.2b MF-AFC For all other sets.
Connect a pattern generator to pin 8 of connector G29 (IF-module) and select a frequency of 38,9 MHz. Connect a voltmeter to pin 11 of connector G29.
Adjust with 5001 the DC voltage to 2.3 V.

2.3 Stereo matrix
Connect a pattern generator and supply a PAL BG signal with stereo sound. Select only the right-hand channel sound. Go into service mode. Choose SND stereo and pull out the right connector (seen from the front side of the set). Put volume maximum with volume button. Align with menu-button so that the sound is just not hearable in the left loudspeaker. Leave now the service mode by putting the set in standby.

8. Survey of error messages on the screen

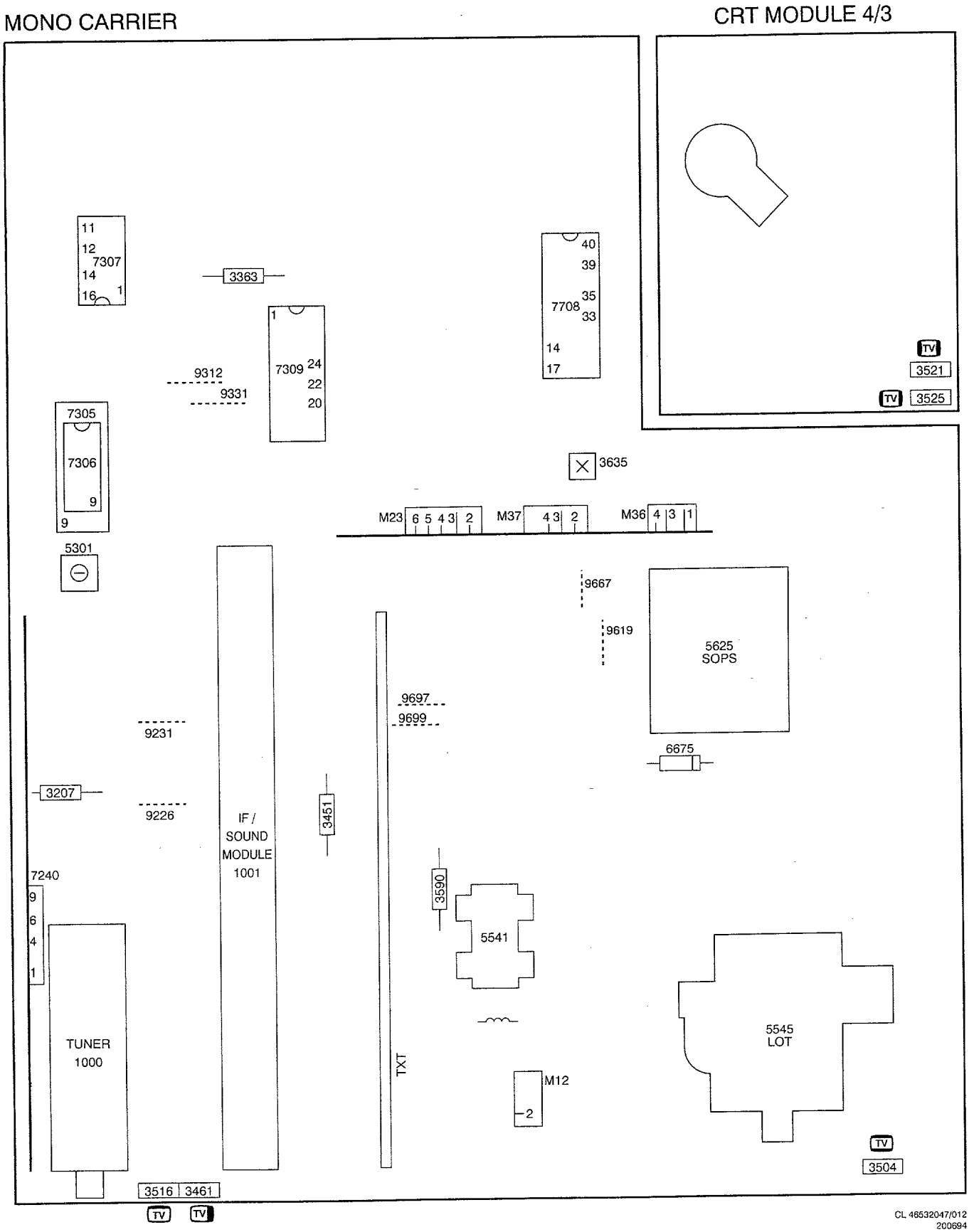
Message on screen	Description	Possible fault
PIP	I^2C error PIP module	+5 on PIP module, IC7406
NICA	I^2C error IC7305 (NICAM sets)	IC7305, +5 on IF module
9860	I^2C error IC7204	+5/+8 on IF module, IC7305
9840	I^2C error IC7205	+5/+8 on IF module, IC7205
TXT	I^2C error teletext module	IC7910/IC7920 , +5 on TEXT module
EPROM	I^2C error IC7710	IC7708/IC7710, +5 on IC's
TUNE	I^2C error tuner	+5/+14 on tuner, TS7003
CHR1	I^2C error IC7308	+14 on IC7308
CHR2	I^2C error IC7309	+14 on IC7309
6415	I^2C error IC7820	
BUS + blinking LED	I^2C bus blocked	I^2C bus check on all IC's

Error messages

Internal microcomputer errors and external errors will be signalled by displaying the error number (by OSD) and by continuous blinking the LED (video related errors only).

The last five errors will be remembered in the non volatile memory (if possible), this is called the error buffer. After a startup of the system (on by main switch or on from standby) only one error will be added to the buffer (first in, first out procedure), only errors different from the last error in the buffer, will be added to this buffer.
The error will be cleared when the "standby" command is given while the system is in service menu mode.
An active error is displayed continuously in service default mode. The buffer is shown in the service menu mode (Service main menu).

Electrical adjustments



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9. Directions for use

1. Service-Default-Mode

The GR2.4 is equipped with a service default mode. The service default mode is a fixed defined condition in which the television can be set.

1.1 Mode definition

The definition of the fixed mode in the service default mode is as follows:

- all sound and picture adjustments are set in the middle position (except volume, which is set at low and zoom set at zero) in 4/3 mode.
- The set is tuned to 475.25 MHz
- system:

* PAL BG or PAL I for single system sets (MULTI-SYSTEM "OFF")
* SECAM L/DK for multi-system sets (MULTI-SYSTEM "ON")
* SECAM DK for sets for Eastern Europe (MULTI-SYSTEM "ON").
* PAL BG for sets for Eastern Europe (MULTI-SYSTEM "OFF").

1.2 Service-default-mode

The service default mode is switched on by briefly short-circuiting the pins M33 and M34 (SERVICE) behind the INSTALL key on the carrier panel when switching the unit on with the mains switch. In order to indicate that the unit is in the service default mode, an "SER" appears on the screen.
The service default mode can only be switched off by switching the unit to standby (⏻). The set is switched off and then on again using the mains switch or mains plug, the service default mode remains switched on.
Searching for transmitter frequencies begins following the simultaneous pressing of both "install" keys on the remote control. When the service default mode is operational the following functions are switched off:
- automatic cut-off circuit.
The set can be controlled normally.

1.3 Service menu

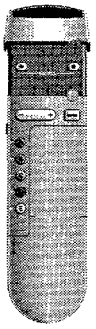
- Service menu
  The service menu is activated by simultaneously pressing the "menu" and "-" keys on the local operating panel. The service menu now appears on the screen. The service menu offers the facility to set various options and make a number of picture tube settings. The various components in the service menu are selected using the coloured keys on the remote control.The adjustment of the various components is performed with the aid of the "menu +/-" keys on the remote control. The adjusted values and options are immediately stored in the EEPROM when the service menu is exited via "menu on" or "mainsknob" button. With the "menu" key you return to the "default service mode".

Remarks 1:
If a multi-system set is nevertheless to be used with the PAL BG system in the service default mode, the option "MULTI" can be temporarily switched off ("OFF").

Remarks 2:
If a multi-system set for Eastern Europe is nevertheless to be used with the PAL BG system in the service default mode, the option "MULTI" can be temporarily switched off ("OFF").

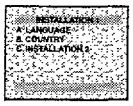
9. Directions for use

Calling up the installation menu



This menu enables you to tune in the channels on the TV set.

- Open the flap on the remote control.
- Press both the ⊕ and ⑤ keys at the same time.
- ▷ The **INSTALLATION 1** menu appears on the screen.



Selecting the menu language

You may choose between several languages for the menus which appear on the screen.
You can select **ENGLISH** or one of the other languages offered.

After calling up the **INSTALLATION 1** menu:

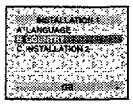
- Press the red key Ⓐ.
- ▷ A display area appears at the bottom of the screen.
- Press the ⟵ key to select your chosen language.
- ▷ The text for all menus will appear in the language which you have chosen. Go on to the next adjustment.

Selecting the country

You should now select the country in which you are situated.

After calling up the **INSTALLATION 1** menu:

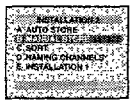
- Press the green key Ⓑ.
- ▷ A display area appears at the bottom of the screen.
- Press the ⟵ key to select the letters corresponding to your country (GB for Great Britain).
- ▷ Your choice is displayed at the bottom of the screen. You can now go on to **chapter 7** on page 4.



Manual store

After calling up the **INSTALLATION 2** menu (see previous page):

- Press the green key Ⓑ.
- ▷ The **MANUAL STORE** menu appears.



step a

Selecting the tuning mode

This TV set allows you to choose the tuning mode: **tuning by channel number** (if you know the channel numbers on which the TV channels are broadcast) or **tuning by frequency**.

- Press the red key Ⓐ.
- ▷ The lower bar of the menu is displayed in red.
- Press the ⟵ key to select the tuning mode.
- ▷ The indication **FREQ xxx MHZ** means tuning by frequency. The indication **C xx** or **S xx** means tuning by channel number. **Go on to step b.**

Direct selection of a transmitter

If you know the frequency or the channel number of the TV programme which you wish to receive, you can directly enter the number using the keys numbered ⓪ to ⑨ or the ⟵ key.
For example: in tuning by frequency mode, enter 064 for 64 MHz; in tuning by channel number mode, enter 21 for C21 (for 64,25 MHz, enter 064: the exact adjustment is carried out automatically).
Go directly to **step c**.

step b

Search

- Press the green key Ⓑ.
- ▷ The lower bar of the menu is displayed in green, the search starts. The frequency or channel number counts upwards. As soon as a TV channel is found, the counting stops and the rectangle is displayed in blue.

If you want to store this channel, **go on to step c**.

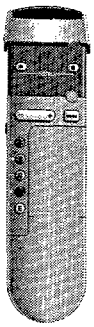
If you do not want to store the channel:

- Press the green key Ⓑ again.
- ▷ The search continues.

Fine tuning

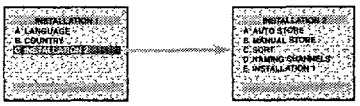
If the reception of a TV channel is not satisfactory, you can adjust its frequency or channel number by using the ⟵ key.

Tuning-in TV channels



Starting from the **INSTALLATION 1** menu:

- Press the yellow key Ⓒ.
- ▷ The **INSTALLATION 2** menu appears on the screen.



You have the choice between two methods:

- **automatic store:** the TV set stores all the available channels in your area. You just have to renumber the channels according to your preference.
- **manual store:** you can manually tune-in each channel, one by one.

Automatic store

After calling up the **INSTALLATION 2** menu (see above):

- Press the red key Ⓐ.
- ▷ The **AUTO STORE** menu appears.
- Press the red key Ⓐ to start the search.
- ▷ The indication **SEARCHING PLEASE WAIT** appears on the screen. The TV set searches through the complete frequency range and stores all the TV channels which it finds. **The search takes several minutes.** A horizontal scale shows the progress of the search. **You must wait until the horizontal bar has reached the end of the line.**

When the search has finished:

The indication **CHANNELS FOUND** flashes. The total number of TV channels found is displayed. The TV channels have been numbered in the order in which they were found. You must therefore sort them to give them the desired channel numbers.

- Press the MENU key.
- ▷ The **INSTALLATION 2** menu reappears. You now have to sort the channels: turn **to chapter 8** on page 7.

step c

Numbering the programme

- Press the yellow key Ⓒ.
- ▷ A display area appears at the bottom of the screen.
- Press the ⟵ P ⟶ key or the keys numbered ⓪ to ⑨ to enter the programme number. Go on to **step d**.

step d

Storing

- Press the blue key Ⓓ.
- ▷ The indication **PROGRAMME STORED** appears at the bottom of the screen, the TV channel is stored.

repeat

steps **b, c, d**
or **a, b, c, d** if you want to change the tuning mode.

When tuning-in of TV channels is completed

- Press the MENU key.
- ▷ The **INSTALLATION 2** menu reappears.

You can now give names to the TV channels: turn to **chapter 9** on page 8.

To exit from the INSTALLATION 2 menu:

- Press the MENU key again.

You can now proceed with operating the TV set (page 9).

Naming channels

You can give a name of up to 5 characters to each of the first 40 channels on your TV set (examples: BBC1, CNN...). This function allows you to recognise and display the name and number of the programme being watched.

Starting from the **INSTALLATION 2** menu:

- Press the blue key Ⓓ.
- ▷ The **NAMING CHANNELS** menu appears.

step a Programme number

- Press the red key Ⓐ.
- ▷ The programme number is displayed at the bottom of the screen.
- Use the ⟶ key or the keys numbered ⓪ to ⑨ to select the channel to which you want to give a name.

step b Auto name

The **AUTO NAME** function enables you to automatically assign the first 5 characters of a name to a TV channel when teletext is available.

When the TV channel is on the screen:

- Press the green key Ⓑ.
- ▷ The lower bar of the menu is displayed in green.
- Press the ⟶ key to carry out the **AUTO NAME**.
- ▷ The first 5 characters of the programme name are displayed. If nothing is displayed, this means that the programme name is not broadcast, go on to **step C**.

step c Select character

- Press the yellow key Ⓒ.
- ▷ The character display area appears. A cursor is positioned at the first character.
- Use the ⟶ key to select the first character.

step d Next position

When the desired character has been chosen:

- Press the blue key Ⓓ to enable the cursor to be moved.
- ▷ Use the ⟶ key to move the cursor to the left or to the right.
- Press the yellow key Ⓒ again.
- ▷ Use the ⟶ key to choose the second character. Repeat the operation as many times as needed to select all characters.

repeat steps **a**, **b**, **c** and **d** for all the TV channels you wish to name

To exit from the NAMING CHANELS menu:

- Press the MENU key.
- ▷ The **INSTALLATION 2** menu reappears.

To exit from the INSTALLATION 2 menu:

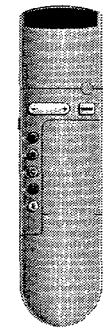
- Press the MENU key again.

Calling up the main menu

The main menu gives you access to the adjustments and special features of your TV set.

The MENU key enables you to call up or to exit from the menu.

The coloured keys Ⓐ, Ⓑ, Ⓒ, Ⓓ and Ⓔ allow access to the various choices within the menus. The ⟶ key enables you to make the adjustments.



To call up the MAIN MENU:

- Press the MENU key on the remote control.
- ▷ The **MAIN MENU** appears on the screen.

Adjusting the picture

After calling up the **MAIN MENU** (see above):

- Press the red key Ⓐ.
- ▷ The **PICTURE** menu appears on the screen.

Brightness, colour, contrast, sharpness

- Press the coloured key Ⓐ, Ⓑ, Ⓒ or Ⓓ corresponding to the adjustment which you want to modify.
- ▷ A horizontal scale appears at the bottom of the screen.
- Press the ⟶ key to make the adjustment.
- ▷ The cursor moves according to your adjustment.
- Press the corresponding coloured key to select another adjustment.

Tint

The tint adjustment allows you to influence the colour reproduction by modifying the white reference.

- Press the white key Ⓔ.
- ▷ A horizontal scale appears at the bottom of the screen.
- Press the ⟶ key to make the adjustment.
- ▷ For a 'warm' picture (redder whites): move the cursor to the maximum (+) position.
- ▷ For a balanced colour reproduction: move the cursor to the middle position.
- ▷ For a 'cool' picture (bluer whites): move the cursor to the minimum (-) position.

To exit from the PICTURE menu

- Press the MENU key.
- ▷ The **MAIN MENU** reappears, move on to "Adjusting the sound".
- To exit from the **MAIN MENU** press the MENU key a second time.

Special features

Starting from the **MAIN MENU**:

- Press the yellow key Ⓒ.
- ▷ The **SPECIAL FEATURES** menu appears on the screen.

Child lock

The child lock function is an electronic lock which disables the keys on the TV set. This function enables you to prevent operation of the TV set (by your children for example). You then simply have to activate the child lock and hide the remote control so that the TV set is unusable.

Starting from the **SPECIAL FEATURES** menu:

- Press the red key Ⓐ.
- ▷ The indication **OFF** is displayed at the bottom of the screen.
- Press the ⟶ key.
- ▷ The indication **ON** appears. The keys on the TV set are no longer active.

To check that the child lock is functioning:

- Press the ⏻ key on the front of the TV set to switch off the set.
- Press the ⏻ key again to switch on.
- ▷ The TV set remains in standby (the red indicator lights up).
- Press one of the keys on the TV set.
- ▷ The indication **CHILD LOCK** appears for a few moments and the screen remains black. The only way of switching on the TV set is to use the remote control.

To cancel the child lock:

- Select the function again and reposition the menu display to **OFF**.

Sleeptimer

This function allows you to program the TV set to automatically switch off after a certain period of time.

Starting from the **SPECIAL FEATURES** menu:

- Press the green key Ⓑ.
- ▷ The indication 00 is displayed at the bottom of the screen.
- Press the ⟶ key to program the duration.
- ▷ Each time you press the key, the duration increases by 15 minutes (up to 90 minutes).
- Press the MENU key twice to exit from the menu.
- ▷ The TV set automatically switches to standby after the programmed time period has elapsed.

To display the remaining time:

- Press the ⓘ key.
- ▷ The remaining time is displayed for a few moments on the screen.

To cancel the programmed switching off:

- Select the function again and reset the menu display to 00.

Demonstration

The demonstration mode triggers off an automatic display of all the TV set's menus:

Starting from the **SPECIAL FEATURES** menu:

- Press the yellow key Ⓒ.
- ▷ The indication **OFF** appears at the bottom of the screen.
- Press the ⟶ key to switch on the demonstration mode.
- ▷ The indication **DEMONSTRATION** is displayed, the OPERATION and INSTALLATION menus are displayed automatically one after the other.

To switch off the demonstration mode:

- Press the MENU key.

Programme list

This function allows you to consult the list of programme names and numbers of the first 40 channels which you have stored in the **INSTALLATION** menu.

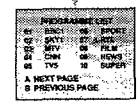
- Press the MENU key.
- ▷ The **MAIN MENU** appears on the screen.
- Press the blue key Ⓓ.
- ▷ The **PROGRAMME LIST** menu appears on the screen with the list of the first 10 channels.

To display the next page:

- Press the red key Ⓐ.

To display the previous page:

- Press the green key Ⓑ.



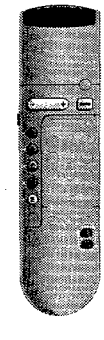
Screen size

This function enables you to adapt 16/9 format pictures to the proportions of your screen (4/3).

- Press the MENU key.
- ▷ The **MAIN MENU** appears on the screen.
- Press the white key Ⓔ.
- ▷ The indication **NORMAL** is displayed at the bottom of the screen.
- Press the ⟶ key.
- ▷ The indication **LARGE** is displayed and a black band appears at the top and bottom of the screen. The picture is reproduced in 16/9 format.

Programmable keys

The remote control has two blue programmable keys ⓫ and ⓬. If you regularly use certain adjustments within the menus (for example the spatial effect, headphone volume, brightness...) it is possible to program direct access to one of these adjustments.



- Press the MENU key.
- ▷ The **MAIN MENU** appears on the screen.

Select the adjustment which you wish to program.
For example, to program the spatial effect:

- Press the green key Ⓑ to call up the **SOUND** menu.
- Press the blue key Ⓓ to select **SPATIAL** effect.
- ▷ The indication **OFF** or **ON** appears at the bottom of the screen.
- Use the blue keys ⓫ and ⓬ instead of the ⟶ key to make the adjustment.
- ▷ The sound is modified. The keys ⓫ and ⓬ are automatically programmed.
- Press the MENU key twice to exit from the menu.

To check the function:

- Press the blue keys ⓫ and ⓬.
- ▷ Each time the keys are pressed, the spatial effect is switched on or off. From now onwards, these two keys allow you to adjust the spatial effect directly, without using the menus.
Carry out the operation on the adjustment of your choice.

10. Spare parts list / Stükliste / Liste des pièces

Main carrier [A/B/C/D]

Various

▲	4822 265 30389	2P male vert yellow
	4822 264 40207	3P male vert WTB
	4822 267 40666	3P male vert blue
	4822 264 40239	3P male vert green
▲	4822 265 30877	3P male vert
	4822 267 40696	3P male vert white
	4822 267 41113	3P female hor white
	4822 267 31694	3P female hor blue
	4822 267 40794	3P female vert grey WTB
	4822 267 40699	4P male vert red
	4822 265 30378	4P male vert WTB
	4822 290 40283	5P male vert green
	4822 265 40421	6P male vert WTB
	4822 267 30546	6P female vert grey
	4822 267 50621	7P male vert white
▲	4822 267 60243	Euroconnector (scart) blue
▲	4822 256 92053	Fuse holder
	4822 256 91879	Holder
▲	4822 502 13712	Screw 12x3
	4822 492 70871	Spring
	4822 492 70143	Spring 10x33
	4822 466 30395	Shield microprocessor
1000	4822 210 10436	U944C/IEC
1000	4822 210 10611	UV916M
1240▲	4822 252 51174	Fuse 1.6A 65V
1242▲	4822 252 51174	Fuse 1.6A 65V
1300	4822 242 81807	8.867570 MHz
1301	4822 242 70304	8.867238 MHz
1534▲	4822 252 51172	Fuse 3.15A 65V
1559▲	4822 252 51173	Fuse 1A 65V
1563	4822 526 10405	Bead
1564	4822 526 10405	Bead
1580▲	4822 252 51174	Fuse 1.6A 65V
1600▲	4822 070 32502	Fuse 2.5A 65V
1601▲	4822 252 51175	Fuse 2.5A 65V
1640	4822 526 10405	Bead
1641	4822 526 10405	Bead
1642	4822 526 10405	Bead
1643	4822 526 10405	Bead
1702	4822 242 81841	8MHz

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2001	4822 124 40214	1000µF 20% 25V
2002	4822 122 31797	22nF 10% 63V
2003	4822 122 33496	100nF 10% 63V
2005▲	4822 124 40196	220µF 20% 16V
2010	4822 124 40248	10µF 20% 63V
2012	4822 122 31768	180pF 2% 63V
2231▲	4822 124 41525	100µF 20% 25V
2232	4822 122 31797	22nF 10% 63V
2236	4822 122 31644	2.2nF 10% 63V
2236	4822 122 31784	4.7nF 10% 50V
2237	4822 122 31947	100nF 20% 63V
2238	4822 122 32153	1.8nF 10% 63V
2238	4822 122 33498	2.7nF 10% 63V
2239	4822 122 31947	100nF 20% 63V
2240	4822 124 40214	1000µF 20% 25V
2241	5322 121 42386	100nF 5% 63V
2242	4822 124 40214	1000µF 20% 25V
2243	4822 121 41856	22nF 5% 250V
2245	4822 121 41856	22nF 5% 250V
2246	4822 124 41596	22µF 20% 50V
2248	4822 124 40849	330µF 20% 16V
2249	4822 122 31797	22nF 10% 63V
2252	4822 121 41857	10nF 5% 250V
2253	4822 121 41857	10nF 5% 250V
2254	4822 121 51252	470nF 5% 63V
2255	4822 121 51252	470nF 5% 63V
2256	4822 122 32142	270pF 2% 63V
2257	4822 122 32142	270pF 2% 63V
2258	4822 121 51252	470nF 5% 63V
2259	4822 121 51252	470nF 5% 63V
2260	4822 122 31116	2.2nF 10% 500V
2261	4822 122 31116	2.2nF 10% 500V
2300	4822 122 32482	22pF 2% 63V
2301	4822 122 32999	2.2nF 5%
2303	4822 122 31768	180pF 2% 63V
2304	4822 122 31773	560pF 2% 63V
2304	4822 122 32999	2.2nF 5%
2305	4822 126 10324	33pF 2% 63V
2306	4822 122 31965	220pF 2% 63V
2307	4822 122 33496	100nF 10% 63V
2308	4822 122 31797	22nF 10% 63V
2310	4822 121 41857	10nF 5% 250V
2310	4822 121 42408	220nF 5% 63V
2311	4822 122 33496	100nF 10% 63V
2312	4822 121 41857	10nF 5% 250V
2312	4822 121 42408	220nF 5% 63V
2313	4822 125 50045	1p8-22p 250V
2314	5322 121 42661	330nF 5% 63V
2314	5322 122 32818	2.2nF 10% 100V
2315	4822 122 31825	27pF 2% 63V
2316	4822 122 33496	100nF 10% 63V
2319▲	4822 122 32442	10nF 50V
2321	4822 122 31797	22nF 10% 63V
2322	4822 122 31797	22nF 10% 63V
2323	4822 122 32542	47nF 10% 63V
2325	4822 122 31965	220pF 2% 63V
2325	4822 122 32542	47nF 10% 63V
2326	4822 122 31839	82pF 2% 63V
2328▲	4822 122 32442	10nF 50V
2329▲	4822 122 32442	10nF 50V
2330	4822 122 33496	100nF 10% 63V
2331	4822 122 33496	100nF 10% 63V
2332	4822 122 33496	100nF 10% 63V
2333	4822 122 33496	100nF 10% 63V
2334	4822 122 33496	100nF 10% 63V
2336	4822 122 31797	22nF 10% 63V
2337	4822 122 31797	22nF 10% 63V
2338	4822 122 31797	22nF 10% 63V
2339	4822 122 33496	100nF 10% 63V
2340	4822 122 31797	22nF 10% 63V
2341	4822 122 31797	22nF 10% 63V
2342	4822 122 33496	100nF 10% 63V
2343	4822 122 33496	100nF 10% 63V
2344	4822 122 33496	100nF 10% 63V
2345	4822 122 31797	22nF 10% 63V
2348▲	4822 124 40196	220µF 20% 16V
2349	5322 122 31647	1nF 10% 63V
2350▲	4822 124 40433	47µF 20% 25V
2351	4822 122 31797	22nF 10% 63V
2352	5322 122 31647	1nF 10% 63V
2353	4822 122 33496	100nF 10% 63V
2354	4822 124 40242	1µF 20% 63V
2355	4822 124 40849	330µF 20% 16V
2356	4822 122 31797	22nF 10% 63V
2357	4822 122 31797	22nF 10% 63V
2358	4822 122 31797	22nF 10% 63V
2359	4822 122 31765	100pF 2% 63V
2360	4822 122 33496	100nF 10% 63V
2361	4822 122 33496	100nF 10% 63V
2362	4822 122 33496	100nF 10% 63V
2363	4822 122 31765	100pF 2% 63V
2365	5322 121 42661	330nF 5% 63V
2366	4822 124 40248	10µF 20% 63V
2367	4822 124 40753	6.8µF 20% 63V
2368	4822 126 13094	11pF 2% 63V
2369	4822 121 51252	470nF 5% 63V
2370	4822 121 42408	220nF 5% 63V
2374	4822 122 31772	47pF 2% 63V
2378	4822 122 33496	100nF 10% 63V
2385	4822 122 31772	47pF 2% 63V
2386	4822 122 33481	1800pF 2% 63V
2451	4822 122 33496	100nF 10% 63V
2453	5322 124 41431	22µF 20% 35V
2455	5322 122 31647	1nF 10% 63V
2456	4822 124 40242	1µF 20% 63V
2457	4822 122 33496	100nF 10% 63V
2458	4822 121 42937	2.7nF 1% 250V
2459	4822 122 33496	100nF 10% 63V
2460	4822 122 32566	3.9nF 10% 63V
2460	4822 122 33498	2.7nF 10% 63V
2461	5322 122 31647	1nF 10% 63V
2462	4822 122 31797	22nF 10% 63V
2464	4822 122 33496	100nF 10% 63V
2465	4822 124 40198	470µF 20% 16V
2466	4822 124 40248	10µF 20% 63V
2467	4822 122 33496	100nF 10% 63V
2468	4822 124 22652	2.2µF 20% 50V
2469	4822 124 41596	22µF 20% 50V
2470	4822 122 31772	47pF 2% 63V
2471	5322 121 42661	330nF 5% 63V
2473	5322 121 42661	330nF 5% 63V
2475	5322 122 31647	1nF 10% 63V
2476▲	4822 122 32442	10nF 50V
2500	4822 122 31773	560pF 2% 63V
2501	4822 122 33481	1800pF 2% 63V
2502	5322 124 41381	22µF 20% 50V
2503▲	4822 122 32442	10nF 50V
2505	4822 122 32542	47nF 10% 63V
2506	4822 124 80065	1000µF 20% 50V
2507	4822 122 31797	22nF 10% 63V
2509	4822 121 51319	1µF 10% 63V
2524	4822 124 42167	4.7µF 20% 50V
2539	4822 124 40198	470µF 20% 16V
2543	4822 122 31784	4.7nF 10% 50V
2544	4822 122 32183	56nF 10% 50V
2545▲	4822 126 12273	1200pF 10%R(HR) 2KV
2545▲	4822 126 12274	1500pF 10%R(HR) 2KV
2546▲	4822 121 70434	11nF 5% 1.6KV
2546▲	4822 121 70538	13nF 5% 1.6KV
2547▲	4822 121 42934	27nF 10% 400V
2547▲	5322 121 44219	47nF 10% 400V
2548	4822 121 41856	22nF 5% 250V
2549▲	4822 121 42074	470 nF 10% 400V
2550▲	4822 121 51528	470nF 5% 250V
2550▲	5322 121 44128	680nF 10% 250V
2551	4822 124 80069	1µF 20% 160V
2552	4822 122 33496	100nF 10% 63V
2559	4822 124 80059	100µF 20% 25V
2560▲	4822 121 51408	33nF 10% 250V
2561	4822 122 31766	120pF 2% 63V
2570	4822 124 80071	22µF 20% 160V
2574	4822 122 30057	2.7nF 10% 100V
2580	4822 124 80061	1000µF 20% 25V
2588	4822 051 10008	0R00 5% 0.25W
2590	5322 121 42498	680nF 5% 63V
2600▲	4822 121 70285	470nF 10% 250V
2605	4822 124 23492	220µF 50% 385V
2605▲	4822 124 80728	150µF 20% 385V
2607▲	4822 121 51469	1nF 400V
2608	4822 122 31965	220pF 2% 63V
2612	5322 122 31647	1nF 10% 63V
2617	4822 121 51252	470nF 5% 63V
2617	4822 121 51319	1µF 10% 63V
2620	5322 121 42465	68nF 5% 63V
2625▲	4822 126 12272	1nF 10%R(HR) 2KV
2626▲	4822 126 12267	470pF 10%R(HR) 2KV
2630	4822 124 23418	47µF 200V
2630	4822 124 42448	100µF 20% 200V
2631	4822 124 23418	47µF 200V
2631	4822 124 42448	100µF 20% 200V
2632▲	4822 126 11382	1nF 10% 1KV
2640	4822 124 80061	1000µF 20% 25V
2641	4822 124 80061	1000µF 20% 25V
2652	5322 122 32331	1nF 10% 100V
2653	5322 122 32331	1nF 10% 100V
2658	5322 122 32838	82nF 10% 63V
2660	4822 124 80061	1000µF 20% 25V
2672	5322 124 41379	2.2µF 20% 50V
2675	4822 124 80064	680µF 20% 50V
2675	4822 124 80065	1000µF 20% 50V
2676	5322 122 32331	1nF 10% 100V
2700	4822 124 40248	10µF 20% 63V
2704	4822 122 32542	47nF 10% 63V
2705	4822 122 31766	120pF 2% 63V
2706	4822 124 41643	100µF 20% 16V
2707▲	4822 122 32442	10nF 50V
2708	4822 122 31766	120pF 2% 63V
2709	4822 122 32139	12pF 2% 63V
2710	4822 122 32139	12pF 2% 63V
2711	4822 122 31825	27pF 2% 63V
2712	4822 122 31825	27pF 2% 63V
2713▲	4822 124 41525	100µF 20% 25V
2716	4822 122 33496	100nF 10% 63V
2718	4822 122 33496	100nF 10% 63V
2719	5322 121 42386	100nF 5% 63V
2721	4822 122 31784	4.7nF 10% 50V
2722	4822 122 33496	100nF 10% 63V
2853	4822 121 43856	4.7nF 5% 250V
2854	4822 122 33496	100nF 10% 63V
2860	4822 124 40248	10µF 20% 63V

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3001▲	4822 052 10399	39Ω 5% 0.33W
3002	4822 116 52257	22k 5% 0.5W
3003	4822 116 52296	6k8 5% 0.5W
3009	4822 116 52175	100Ω 5% 0.5W
3010	4822 116 52175	100Ω 5% 0.5W
3200	4822 051 10223	22k 2% 0.25W
3201	4822 051 10562	5k6 2% 0.25W
3202	4822 051 10122	1k2 2% 0.25W
3203▲	4822 116 52233	10k 5% 0.5W
3204	4822 051 10101	100Ω 2% 0.25W
3205	4822 051 10223	22k 2% 0.25W
3206	4822 051 10562	5k6 2% 0.25W
3207	4822 116 52207	1k2 5% 0.5W
3208	4822 116 52228	680Ω 5% 0.5W
3208▲	4822 116 52263	2k7 5% 0.5W
3209	4822 116 52228	680Ω 5% 0.5W
3209▲	4822 116 52263	2k7 5% 0.5W
3220	4822 051 10392	3k9 2% 0.25W
3222	4822 116 52234	100Ω 5% 0.5W
3223	4822 051 10109	10Ω 2% 0.25W
3224	4822 051 20222	2k2 5% 0.1W
3225	4822 051 10272	2k7 2% 0.25W
3226	4822 051 10333	33k 2% 0.25W
3227	4822 051 10333	33k 2% 0.25W
3228	4822 116 52211	150Ω 5% 0.5W
3229	4822 051 10562	5k6 2% 0.25W
3230	4822 051 10223	22k 2% 0.25W
3231▲	4822 051 10472	4k7 2% 0.25W
3240▲	4822 052 10828	8Ω2 5% 0.33W
3241▲	4822 052 10828	8Ω2 5% 0.33W
3242	4822 051 10563	56k 2% 0.25W
3243	4822 051 10563	56k 2% 0.25W
3244▲	4822 051 10103	10k 2% 0.25W
3245▲	4822 051 10103	10k 2% 0.25W
3250	4822 116 80175	4k7 5% 0.5W
3251	4822 116 80175	4k7 5% 0.5W
3253	4822 116 52211	150Ω 5% 0.5W
3254	4822 116 52211	150Ω 5% 0.5W
3300	4822 051 10822	8k2 2% 0.25W
3301	4822 051 10272	2k7 2% 0.25W
3302	4822 051 20222	2k2 5% 0.1W
3303	4822 051 10122	1k2 2% 0.25W
3303	4822 051 10392	3k9 2% 0.25W
3304	4822 051 10182	1k8 2% 0.25W
3305	4822 051 10431	430Ω 2% 0.25W
3306▲	4822 116 52233	10k 5% 0.5W
3307	4822 051 10561	560Ω 2% 0.25W
3307	4822 051 10681	680Ω 2% 0.25W
3308	4822 051 20183	18k 5% 0.1W
3309	4822 051 10562	5k6 2% 0.25W
3310▲	4822 051 10472	4k7 2% 0.25W
3311▲	4822 051 10103	10k 2% 0.25W
3312	4822 051 10331	330Ω 2% 0.25W
3313	4822 051 10274	270k 2% 0.25W
3314▲	4822 116 52233	10k 5% 0.5W
3318	4822 116 52224	470Ω 5% 0.5W
3319▲	4822 051 10103	10k 2% 0.25W
3321	4822 051 10473	47k 2% 0.25W
3323	4822 116 52305	820k 5% 0.5W
3324	4822 051 10331	330Ω 2% 0.25W
3325	4822 116 52175	100Ω 5% 0.5W
3326	4822 051 10101	100Ω 2% 0.25W
3327	4822 051 10331	330Ω 2% 0.25W
3328	4822 051 10102	1k 2% 0.25W
3329▲	4822 116 52256	2k2 5% 0.5W
3330	4822 051 10109	10Ω 2% 0.25W
3331	4822 051 10109	10Ω 2% 0.25W
3332	4822 050 15609	56Ω 1% 0.4W
3333	4822 051 20222	2k2 5% 0.1W
3334▲	4822 053 11279	27Ω 5% 2W
3334	4822 053 11399	39Ω 5% 2W
3335	4822 116 52226	560Ω 5% 0.5W
3336▲	4822 052 10479	47Ω 5% 0.33W
3342▲	4822 051 10103	10k 2% 0.25W
3343	4822 051 10473	47k 2% 0.25W
3346	4822 051 10332	3k3 2% 0.25W
3347▲	4822 116 52219	330Ω 5% 0.5W
3348▲	4822 116 52219	330Ω 5% 0.5W
3349▲	4822 116 52219	330Ω 5% 0.5W
3350	4822 050 11002	1k 1% 0.4W
3356▲	4822 050 21008	1Ω 1% 0.6W
3358	4822 051 10331	330Ω 2% 0.25W
3359▲	4822 116 52219	330Ω 5% 0.5W
3361	4822 051 10101	100Ω 2% 0.25W
3362	4822 051 10102	1k 2% 0.25W
3363	4822 116 52175	100Ω 5% 0.5W
3364	4822 050 21502	1k5 1% 0.6W
3366	4822 116 52297	68k 5% 0.5W
3367	4822 116 52175	100Ω 5% 0.5W
3368	4822 116 52175	100Ω 5% 0.5W
3369	4822 116 52175	100Ω 5% 0.5W
3370▲	4822 051 10472	4k7 2% 0.25W
3371	4822 051 10332	3k3 2% 0.25W
3375	4822 051 10109	10Ω 2% 0.25W
3376	4822 051 10109	10Ω 2% 0.25W
3380	4822 051 10101	100Ω 2% 0.25W
3381	4822 051 10101	100Ω 2% 0.25W
3385	4822 051 10102	1k 2% 0.25W
3450	4822 116 52238	12k 5% 0.5W
3451	4822 116 52175	100Ω 5% 0.5W
3453	4822 116 52251	18k 5% 0.5W
3454	4822 050 11002	1k 1% 0.4W
3455	4822 051 10122	1k2 2% 0.25W
3456▲	4822 051 10103	10k 2% 0.25W
3457	4822 116 83726	27k 5% 0.125W
3458	4822 117 11455	7k87 1%
3459	4822 116 52304	82k 5% 0.5W
3460	4822 116 52271	33k 5% 0.5W
3461	4822 100 10436	22k CARB LIN 0.1W
3462	4822 116 52257	22k 5% 0.5W
3463	4822 116 52251	18k 5% 0.5W
3464	4822 051 10123	12k 2% 0.25W

BTB = Board To Board; WTB = Wire To Board

3465	4822 051 10394	390k 2% 0.25W
3466	4822 051 10681	680Ω 2% 0.25W
3467	4822 053 20275	2M7 5% 0.25W
3467	4822 053 20335	3M3 5% 0.25W
3468	4822 051 10682	6k8 2% 0.25W
3469	4822 051 10229	22Ω 2% 0.25W
3470▲	4822 116 52233	10k 5% 0.5W
3471	4822 116 52239	120k 5% 0.5W
3471	4822 116 52285	470k 5% 0.5W
3473	4822 116 52265	270k 5% 0.5W
3474	4822 051 10562	5k6 2% 0.25W
3475	4822 051 10184	180k 2% 0.25W
3476	4822 051 10104	100k 2% 0.25W
3477	4822 051 10008	0Ω 5% 0.25W
3477	4822 051 10228	2Ω2 5% 0.25W
3478	4822 051 10008	0Ω 5% 0.25W
3478	4822 051 10478	4Ω7 5% 0.25W
3479▲	4822 116 52219	330Ω 5% 0.5W
3480	4822 050 11002	1k 1% 0.4W
3481▲	4822 116 52283	4k7 5% 0.5W
3482▲	4822 116 52283	4k7 5% 0.5W
3483▲	4822 052 10339	33Ω 5% 0.33W
3484	4822 051 20183	18k 5% 0.1W
3485	4822 051 10682	6k8 2% 0.25W
3486	4822 051 10182	1k8 2% 0.25W
3487	4822 116 52231	820Ω 5% 0.5W
3488	4822 051 10471	470Ω 2% 0.25W
3489	4822 051 10008	0Ω 5% 0.25W
3490	4822 116 52296	6k8 5% 0.5W
3501	4822 051 10229	22Ω 2% 0.25W
3501	4822 051 10279	27Ω 2% 0.25W
3502▲	4822 053 10122	1k2 5% 1W
3502▲	4822 053 10272	2k7 5% 1W
3503▲	4822 052 10128	1Ω2 5% 0.33W
3503▲	4822 052 10478	4Ω7 5% 0.33W
3504	4822 100 11684	100Ω 10% 0.1W
3505	4822 051 10471	470Ω 2% 0.25W
3506	4822 051 10334	330k 2% 0.25W
3507	4822 051 10223	22k 2% 0.25W
3507	4822 051 10273	27k 2% 0.25W
3508	4822 051 10228	2Ω2 5% 0.25W
3509	4822 051 10228	2Ω2 5% 0.25W
3510	4822 051 10228	2Ω2 5% 0.25W
3511	4822 051 10228	2Ω2 5% 0.25W
3512	4822 051 10228	2Ω2 5% 0.25W
3513▲	4822 053 10331	330Ω 5% 1W
3514	4822 051 10182	1k8 2% 0.25W
3515	4822 051 10228	2Ω2 5% 0.25W
3516	4822 100 10436	22k CARB LIN 0.1W
3517	4822 051 10228	2Ω2 5% 0.25W
3519	4822 051 10228	2Ω2 5% 0.25W
3520▲	4822 116 52283	4k7 5% 0.5W
3523	4822 051 10228	2Ω2 5% 0.25W
3529	4822 051 10228	2Ω2 5% 0.25W
3535	4822 051 10151	150Ω 2% 0.25W
3535	4822 051 51201	120Ω 1% 0.125W
3537	4822 116 52234	100Ω 5% 0.5W
3539	4822 053 20474	470k 5% 0.25W
3540	4822 051 51201	120Ω 1% 0.125W
3541	4822 116 52257	22k 5% 0.5W
3542	4822 051 10102	1k 2% 0.25W
3542	4822 051 10272	2k7 2% 0.25W
3543	4822 116 52175	100Ω 5% 0.5W
3545	4822 113 80576	180Ω 10% 5W
3545	4822 113 80668	330Ω 5% 5W
3546	4822 116 52206	120Ω 5% 0.5W
3546	4822 116 52213	180Ω 5% 0.5W
3548	4822 116 52175	100Ω 5% 0.5W
3549	4822 050 21203	12k 1% 0.6W
3550	4822 050 21203	12k 1% 0.6W
3551▲	4822 050 25601	560Ω 1% 0.6W
3552▲	4822 050 25601	560Ω 1% 0.6W
3553▲	4822 052 10561	560Ω 5% 0.33W
3560	4822 116 52244	15k 5% 0.5W
3560	4822 116 52271	33k 5% 0.5W
3561	4822 051 10332	3k3 2% 0.25W
3561	4822 051 20222	2k2 5% 0.1W
3570▲	4822 052 10688	6Ω8 5% 0.33W
3588▲	4822 052 10271	270Ω 5% 0.33W
3589▲	4822 052 10271	270Ω 5% 0.33W
3590▲	4822 116 52272	330k 5% 0.5W
3591	4822 051 10682	6k8 2% 0.25W
3592	4822 051 10681	680Ω 2% 0.25W
3604▲	4822 113 80593	1.5Ω 10% 5W
3606▲	4822 052 10102	1k 5% 0.33W
3610▲	4822 052 10688	6Ω8 5% 0.33W
3610▲	4822 052 10828	8Ω2 5% 0.33W
3616▲	4822 050 24708	4Ω7 1% 0.6W
3617	4822 116 52213	180Ω 5% 0.5W
3619	4822 116 52182	15Ω 5% 0.5W
3620	4822 053 12121	120Ω 5% 3W
3621▲	4822 053 12279	27Ω 5% 3W
3621	4822 053 12479	47Ω 5% 3W
3622	4822 053 12479	47Ω 5% 3W
3626	4822 113 80565	180Ω 5% 5W
3631	4822 050 21204	120k 1% 0.6W
3631	4822 050 22204	220k 1% 0.6W
3634	4822 051 10272	2k7 2% 0.25W
3634	4822 051 10332	3k3 2% 0.25W
3635	4822 101 11187	1k 30% LIN 0.1W
3637	4822 116 52175	100Ω 5% 0.5W
3659	4822 051 10181	180Ω 2% 0.25W
3675	4822 116 52239	120k 5% 0.5W
3675	4822 116 52284	47k 5% 0.5W
3677	4822 051 10108	1Ω 5% 0.25W
3678▲	4822 116 52283	4k7 5% 0.5W
3682▲	4822 053 10561	560Ω 5% 1W
3700	4822 116 52257	22k 5% 0.5W
3706▲	4822 051 10103	10k 2% 0.25W
3707	4822 051 10101	100Ω 2% 0.25W
3708▲	4822 051 10103	10k 2% 0.25W
3708	4822 051 10223	22k 2% 0.25W
3709▲	4822 116 52283	4k7 5% 0.5W
3710	4822 051 10104	100k 2% 0.25W
3718▲	4822 116 52215	220Ω 5% 0.5W
3719▲	4822 116 52215	220Ω 5% 0.5W
3721▲	4822 051 10103	10k 2% 0.25W
3722▲	4822 051 10103	10k 2% 0.25W
3724▲	4822 051 10103	10k 2% 0.25W
3725▲	4822 051 10103	10k 2% 0.25W
3727▲	4822 116 52217	270Ω 5% 0.5W
3728	4822 116 52175	100Ω 5% 0.5W
3729	4822 051 10911	910Ω 2% 0.25W
3730	4822 051 10221	220Ω 2% 0.25W
3732	4822 053 11103	10k 5% 2W
3732	4822 053 11332	3k3 5% 2W
3733	4822 050 23902	3k9 1% 0.6W
3734	4822 050 23902	3k9 1% 0.6W
3734▲	4822 116 52283	4k7 5% 0.5W
3736	4822 116 52175	100Ω 5% 0.5W
3737	4822 050 11002	1k 1% 0.4W
3741	4822 051 10123	12k 2% 0.25W
3742	4822 051 20222	2k2 5% 0.1W
3743▲	4822 051 10472	4k7 2% 0.25W
3746	4822 051 10123	12k 2% 0.25W
3747	4822 051 10822	8k2 2% 0.25W
3748	4822 051 10273	27k 2% 0.25W
3750▲	4822 051 10472	4k7 2% 0.25W
3751	4822 051 10153	15k 2% 0.25W
3752	4822 116 52244	15k 5% 0.5W
3753▲	4822 116 52283	4k7 5% 0.5W
3754	4822 051 10563	56k 2% 0.25W
3755	4822 051 10101	100Ω 2% 0.25W
3756	4822 051 10101	100Ω 2% 0.25W
3757	4822 051 10182	1k8 2% 0.25W
3758	4822 051 10182	1k8 2% 0.25W
3759▲	4822 051 10103	10k 2% 0.25W
3766	4822 116 52243	1k5 5% 0.5W
3767	4822 116 52243	1k5 5% 0.5W
3768	4822 051 10105	1M 5% 0.25W
3769	4822 116 52243	1k5 5% 0.5W
3770	4822 051 10473	47k 2% 0.25W
3771	4822 116 52251	18k 5% 0.5W
3772	4822 116 52276	3k9 5% 0.5W
3775	4822 051 10101	100Ω 2% 0.25W
3776	4822 051 10562	5k6 2% 0.25W
3779▲	4822 116 52233	10k 5% 0.5W
3780▲	4822 051 10103	10k 2% 0.25W
3781▲	4822 051 10472	4k7 2% 0.25W
3791	4822 051 10122	1k2 2% 0.25W
3792	4822 051 10122	1k2 2% 0.25W
3793	4822 051 10122	1k2 2% 0.25W
3794▲	4822 116 52215	220Ω 5% 0.5W
3850	4822 116 52201	75Ω 5% 0.5W
3851▲	4822 116 83953	75Ω 5% 0.125W
3852▲	4822 116 83953	75Ω 5% 0.125W
3853▲	4822 116 83953	75Ω 5% 0.125W
3854▲	4822 116 83953	75Ω 5% 0.125W
3855	4822 116 52201	75Ω 5% 0.5W
3856	4822 116 52175	100Ω 5% 0.5W
3860	4822 116 80176	1Ω 5% 0.5W
3861	4822 051 10159	15Ω 2% 0.25W
3862	4822 116 52218	300Ω 5% 0.5W
3863	4822 051 10223	22k 2% 0.25W
3864	4822 051 20222	2k2 5% 0.1W
3865	4822 116 52284	47k 5% 0.5W
3866	4822 051 10333	33k 2% 0.25W
3867▲	4822 116 52283	4k7 5% 0.5W
3868	4822 051 10394	390k 2% 0.25W
3872	4822 051 10102	1k 2% 0.25W
3886▲	4822 051 10472	4k7 2% 0.25W
3887	4822 050 11002	1k 1% 0.4W
3888	4822 116 52289	5k6 5% 0.5W
3890▲	4822 051 10103	10k 2% 0.25W
4xxx	4822 051 10008	0Ω 5% 0.25W

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5001	4822 156 20966	47µH 10%
5240	4822 157 53066	15µH 10%
5242	4822 157 53066	15µH 10%
5301	4822 157 63075	7.95 µH 8%
5303	4822 157 70827	33µH -5%
5534▲	4822 157 62771	Coil 90°
5534▲	4822 158 10728	Coil 110°
5541▲	4822 157 63078	Driver transformer
5545▲	4822 140 10499	LOT-21"-90°
5545▲	4822 140 10501	LOT 25"/28" BLS
5549▲	4822 157 53069	Balance coil
5554▲	4822 156 50097	Linearity coil LC90
5554▲	4822 157 63079	Linearity coil AT4042
5563▲	4822 157 51462	10µH
5582	4822 157 70826	2.4µH
5588▲	4822 157 53252	Coil
5606▲	4822 157 53995	100µH 10%
5619	4822 156 21125	3.9µH 10%
5619	4822 157 53139	4.7µH
5625▲	4822 146 31062	SOPS transformer
5630	4822 157 70826	2.4µH
5631	4822 158 10551	27µH
5632	4822 157 53066	15µH 10%
5675	4822 157 70826	2.4µH
5701	4822 157 53253	27µH 5%
5703	4822 156 20915	33µH

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6204▲	4822 130 30621	1N4148
6245	4822 130 80446	LL4148
6246	4822 130 81139	LLZ-C3V3
6247	4822 130 81139	LLZ-C3V3
6248	4822 130 80446	LL4148
6300	4822 130 80446	LL4148
6302	4822 130 82192	LLZ-C8V2
6303	4822 130 34382	BZX79-C8V2
6310	4822 130 80884	LLZ-C5V1
6314	4822 130 80446	LL4148
6315▲	4822 130 30621	1N4148
6317	4822 130 80446	LL4148
6319	4822 130 34379	BZX79-C27
6320	4822 130 80877	BAV103
6322▲	4822 130 30621	1N4148
6332	4822 130 82583	LLZ-C9V1
6367	4822 130 80954	LLZ-C5V6
6464	4822 130 81015	LLZ-C10
6483▲	4822 130 30621	1N4148
6503	4822 130 42488	BYD33D
6504	4822 130 80446	LL4148
6505	4822 130 80446	LL4148
6542	4822 130 81222	LLZ-C15
6542	4822 130 82345	LLZ-C22
6546▲	4822 130 83342	BY228
6547▲	4822 130 41602	BYW95C/20
6549▲	4822 130 31983	BAT85
6551	4822 130 42489	BYD33G
6560	4822 130 80446	LL4148
6561	4822 130 30864	BZX79-C68
6563▲	4822 130 80915	BYD74C
6570	4822 130 42489	BYD33G
6571	4822 130 42488	BYD33D
6580	4822 130 80791	BYV28-200/20
6585	4822 130 42489	BYD33G
6590	4822 130 80881	LLZ-C33
6591▲	4822 130 30621	1N4148
6592	4822 130 81144	LLZ-C30
6592	4822 130 82346	LLZ-C27
6610	4822 130 80446	LL4148
6611▲	5322 130 80442	BZV85-C16
6612	4822 130 42488	BYD33D
6615	4822 130 80446	LL4148
6617	4822 130 31456	BZV85-C5V1
6621	4822 130 42488	BYD33D
6622▲	4822 130 30621	1N4148
6624▲	4822 130 31933	1N5061
6625▲	4822 130 31933	1N5061
6630▲	4822 130 33531	BY229F-600
6630▲	4822 130 81175	BYD74G
6640	4822 130 80914	BYD74B
6641	4822 130 80914	BYD74B
6661	4822 130 42488	BYD33D
6666	4822 130 34329	BZX79-C43
6666	4822 130 34368	BZX79-C36
6675	4822 130 80914	BYD74B
6704	4822 130 80446	LL4148
6705	4822 130 80905	LLZ-F5V1
6708	4822 130 81145	LLZ-F2V4
6709	4822 130 34142	BZX79-B33
6860	4822 130 82334	BAS85
6861▲	4822 130 30621	1N4148
6862	4822 130 80446	LL4148

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7003	4822 130 42133	BC817
7200	5322 130 42136	BC848C
7201	5322 130 42136	BC848C
7202	5322 130 42136	BC848C
7240	4822 209 73853	TDA1521/N4
7243	4822 130 42513	BC858C
7244	4822 130 42513	BC858C
7248	5322 130 42136	BC848C
7249	5322 130 42136	BC848C
7301	5322 130 42136	BC848C
7302	4822 130 42513	BC858C
7303	4822 130 40855	BC337
7304	5322 130 42718	BFS20
7305	4822 209 30389	TDA4510/V8
7306	4822 209 33671	TDA4657/V2
7307	4822 209 12635	TDA4665/V3
7308	4822 209 32593	TDA4671/V1
7309	4822 209 33725	TDA4780/V2
7310	5322 130 42136	BC848C
7311	5322 130 42136	BC848C
7312	5322 130 42136	BC848C
7370	5322 130 42136	BC848C
7454	5322 130 41983	BC858B
7455	4822 130 60136	BC856
7456	5322 130 60159	BC846B
7470	4822 209 63423	TDA2579B/N2
7471	5322 130 42136	BC848C
7500▲	4822 130 41344	BC337-40
7502	4822 130 60775	2SD1266P
7503	4822 130 63508	BD536FI
7504▲	4822 130 41344	BC337-40
7505	4822 130 41327	BC327-40
7540▲	4822 130 41344	BC337-40
7545▲	4822 130 61265	BU508AF
7546▲	5322 130 41982	BC848B
7591	5322 130 41983	BC858B
7625▲	4822 130 62735	BUT12AF
7700▲	5322 130 41982	BC848B
7703▲	5322 130 41982	BC848B
7704▲	5322 130 41982	BC848B
7706▲	5322 130 41982	BC848B
7707▲	5322 130 41982	BC848B
7708	4822 209 52642	VERSION-1.2 EUROPA
7708	4822 209 52643	VERSION-1.2-EAST
7710	4822 209 32283	ST24C08B
7850	5322 130 42136	BC848C
7860	5322 130 42136	BC848C
7861	5322 130 42136	BC848C
7886	5322 130 42136	BC848C

1060 Seperate control module [A/B]

Various

	4822 267 40696	3P male vert white
	4822 265 31135	5P male vert black
	4822 267 50621	7P male vert white
	4822 256 92101	Bracket sep control module
	4822 267 31014	Jackplug stereo
	4822 276 30422	Switch 3-fold
1060	4822 212 31627	Seperate control module

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2200	4822 122 31211	100pF 10% 500V
2203	4822 122 31211	100pF 10% 500V
2233	4822 121 41856	22nF 5% 250V
2234	4822 121 41856	22nF 5% 250V
2240	5322 122 32175	270pF 10% 100V

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3200▲	4822 050 21002	1k 1% 0.6W
3202▲	4822 050 21002	1k 1% 0.6W
3246	4822 116 52176	10Ω 5% 0.5W
3247	4822 116 52224	470Ω 5% 0.5W
3248	4822 116 52176	10Ω 5% 0.5W
3249	4822 116 52224	470Ω 5% 0.5W
3775	4822 116 52175	100Ω 5% 0.5W
3776	4822 116 52289	5k6 5% 0.5W
3779▲	4822 116 52233	10k 5% 0.5W
3851	4822 116 80176	1Ω 5% 0.5W

BTB = Board To Board; WTB = Wire To Board

Spare parts list / Stükliste / Liste des pièces

6200	4822 130 31981	BZX79-F3V9
6201	4822 130 31981	BZX79-F3V9
6202	4822 130 31981	BZX79-F3V9
6203	4822 130 31981	BZX79-F3V9

1002 Mains filter module [D]

Various

	4822 265 30389	2P male vert yellow
	4822 265 30877	3P male vertB
	4822 267 40794	3P female vert grey WTB
	4822 290 40288	Snap connector
	4822 404 31317	Mains filter module bracket
1002	4822 212 30975	Mains filter module

2602	4822 126 11141	2.2nF 10% 1K
2604	4822 126 11141	2.2nF 10% 1K

3601	4822 116 40211	P.T.C.
3603	4822 117 10492	10M 5%
3605	4822 052 10102	1k 5% 0.33
3607	4822 050 23901	390Ω 1% 0.6
3608	4822 116 21213	VDR 1mA/275V

5600	4822 157 63073	Mains filter
5605	4822 157 53995	100µH 10%

6602	4822 130 31933	1N5061
6603	4822 130 31933	1N5061
6604	4822 130 31933	1N5061
6605	4822 130 31933	1N5061
6609	4822 130 34281	BZX79-F15
6610	4822 130 34281	BZX79-F15

1005 Picture tube (CRT) module [E]

Various

	4822 265 31133	3P male white
	4822 265 30378	4P male grey
	4822 265 50824	4P female grey
	4822 290 40283	5P male grey
	4822 290 40287	5P female green
	4822 290 40295	7P male grey
	4822 267 51275	7P female white
	4822 265 40252	7P female grey
	4822 267 51033	Single connector
	4822 492 70871	Spring
	4822 256 91879	Holder
▲	4822 255 70261	CRT-socket
1005	4822 212 31629	CRT module 90° narrow neck
1005	4822 212 31628	CRT module 110° BL-S

2301	4822 122 31769	18pF 2% 63V
2301	4822 126 10324	33pF 2% 63V
2331	4822 122 31769	18pF 2% 63V
2331	4822 126 10324	33pF 2% 63V
2344▲	4822 124 40246	4.7µF 20% 63V
2361	4822 122 31825	27pF 2% 63V
2361	4822 122 32504	15pF 2% 63V
2391	4822 121 43878	27pF 2% 500V
2392	4822 124 80213	4.7µF 20% 100V
2393	4822 122 32542	47nF 10% 63V
2411▲	4822 124 80067	4.7µF 20% 63V
2421	4822 122 32482	22pF 2% 63V
2431	4822 121 41689	100nF 10% 250V
2432	5322 124 41378	33µF 20% 35V
2433▲	4822 126 12274	1500pF 10%R(HR) 2KV
2434	5322 122 32334	220pF 10% 100V
2520	5322 124 41299	68µF 20% 25V
2521	4822 122 32891	68nF 10% 63V
2522	5322 121 42661	330nF 5% 63V
2523	4822 122 31981	33nF +-0.5pF 50V
2526	4822 121 51093	6.8nF 5% 250V
2531	4822 121 42408	220nF 5% 63V
2531	4822 121 43396	120nF 5% 63V
2532	4822 124 80066	1µF 20% 63V
2532▲	4822 124 80067	4.7µF 20% 63V
2533	4822 124 40242	1µF 20% 63V
2534	5322 122 31647	1nF 10% 63V

3301	4822 051 10131	130Ω 2% 0.25W
3302	4822 051 10182	1k8 2% 0.25W
3302	4822 051 10362	3k6 2% 0.25W
3303▲	4822 051 10242	2k4 2% 0.25W
3303	4822 051 10272	2k7 2% 0.25W
3304	4822 116 52239	120k 5% 0.5W
3305	4822 051 10154	150k 2% 0.25W
3305	4822 051 10823	82k 2% 0.25W
3306▲	4822 116 52219	330Ω 5% 0.5W
3309	4822 051 10108	1Ω 5% 0.25W
3309	4822 051 10479	47Ω 2% 0.25W
3310▲	4822 116 52219	330Ω 5% 0.5W
3311▲	4822 053 12153	15k 5% 3W
3312▲	4822 052 10271	270Ω 5% 0.33W
3313▲	4822 052 10271	270Ω 5% 0.33W
3314	4822 050 21502	1k5 1% 0.6W
3315	4822 051 10184	180k 2% 0.25W
3315	4822 051 10823	82k 2% 0.25W
3316	4822 051 10224	220k 2% 0.25W
3316	4822 051 10823	82k 2% 0.25W
3331	4822 051 10131	130Ω 2% 0.25W
3332	4822 051 10182	1k8 2% 0.25W
3332	4822 051 10362	3k6 2% 0.25W
3333	4822 116 52259	2k4 5% 0.5W
3333▲	4822 116 52263	2k7 5% 0.5W
3334	4822 116 52239	120k 5% 0.5W
3338	4822 051 10108	1Ω 5% 0.25W
3338	4822 051 10479	47Ω 2% 0.25W
3340▲	4822 116 52219	330Ω 5% 0.5W
3341▲	4822 053 12153	15k 5% 3W
3342▲	4822 052 10271	270Ω 5% 0.33W
3343▲	4822 052 10271	270Ω 5% 0.33W
3344	4822 050 21502	1k5 1% 0.6W
3345	4822 051 10681	680Ω 2% 0.25W
3361	4822 116 52208	130Ω 5% 0.5W
3362	4822 051 10182	1k8 2% 0.25W
3362	4822 051 10362	3k6 2% 0.25W
3364▲	4822 051 10472	4k7 2% 0.25W
3368	4822 051 10108	1Ω 5% 0.25W
3368	4822 051 10479	47Ω 2% 0.25W
3370▲	4822 116 52219	330Ω 5% 0.5W
3371▲	4822 053 12153	15k 5% 3W
3372▲	4822 052 10271	270Ω 5% 0.33W
3373▲	4822 052 10271	270Ω 5% 0.33W
3374	4822 050 21502	1k5 1% 0.6W
3375	4822 051 10184	180k 2% 0.25W
3375	4822 051 10823	82k 2% 0.25W
3376	4822 051 10224	220k 2% 0.25W
3376	4822 051 10823	82k 2% 0.25W
3382	4822 051 10102	1k 2% 0.25W
3383	4822 116 52284	47k 5% 0.5W
3384	4822 116 52277	39k 5% 0.5W
3385	4822 051 10473	47k 2% 0.25W
3391	4822 116 52284	47k 5% 0.5W
3392	4822 051 10123	12k 2% 0.25W
3395	4822 051 10122	1k2 2% 0.25W
3396	4822 051 10104	100k 2% 0.25W
3398	4822 051 10008	0Ω 5% 0.25W
3411	4822 116 52222	390Ω 5% 0.5W
3413	4822 116 52222	390Ω 5% 0.5W
3414	4822 051 10439	43Ω 2% 0.25W
3415	4822 116 52222	390Ω 5% 0.5W
3421	4822 051 10154	150k 2% 0.25W
3424	4822 051 20222	2k2 5% 0.1W
3431▲	4822 052 10181	180Ω 5% 0.33W
3431▲	4822 052 10271	270Ω 5% 0.33W
3432▲	4822 052 10229	22Ω 5% 0.33W
3433▲	4822 052 10128	1Ω2 5% 0.33W
3433▲	4822 052 10188	1Ω8 5% 0.33W
3434	4822 050 21502	1k5 1% 0.6W
3435	4822 050 21502	1k5 1% 0.6W
3436	4822 053 20825	8M2 5% 0.25W
3442	4822 116 52239	120k 5% 0.5W
3443▲	4822 051 10242	2k4 2% 0.25W
3443	4822 051 10272	2k7 2% 0.25W
3446	4822 051 10683	68k 2% 0.25W
3447	4822 051 10102	1k 2% 0.25W
3448	4822 051 10008	0Ω 5% 0.25W
3455	4822 051 10102	1k 2% 0.25W
3456	4822 050 11002	1k 1% 0.4W
3457	4822 051 10244	240k 2% 0.25W
3512	4822 051 10228	2Ω2 5% 0.25W
3518	4822 051 10151	150Ω 2% 0.25W
3520	4822 116 52211	150Ω 5% 0.5W
3521	4822 101 20902	4k7 10% LIN 0.05W
3522	4822 051 10152	1k5 2% 0.25W
3524	4822 051 10683	68k 2% 0.25W
3525	4822 100 20169	10k 10% LIN 0.05W
3525	4822 100 20644	22k 10% LIN 0.05W
3526	4822 050 26803	68k 1% 0.6W
3526	4822 050 26804	680k 1% 0.6W
3527	4822 051 10274	270k 2% 0.25W
3528	4822 051 20222	2k2 5% 0.1W
3529	4822 051 10008	0Ω 5% 0.25W
3529	4822 051 10471	470Ω 2% 0.25W
3530	4822 051 10008	0Ω 5% 0.25W
3530	4822 051 10102	1k 2% 0.25W
3531	4822 051 10008	0Ω 5% 0.25W
3531	4822 051 10104	100k 2% 0.25W
3532▲	4822 051 10103	10k 2% 0.25W
3533	4822 116 52207	1k2 5% 0.5W
3533	4822 116 52303	8k2 5% 0.5W
3534▲	4822 052 10828	8Ω2 5% 0.33W
3535	4822 051 10008	0Ω 5% 0.25W
3535	4822 051 10474	470k 2% 0.25W
3571	4822 051 10273	27k 2% 0.25W
3572	4822 051 10153	15k 2% 0.25W
3575	4822 051 10182	1k8 2% 0.25W
3578	4822 116 52245	150k 5% 0.5W
3580▲	4822 051 10103	10k 2% 0.25W
4xxx	4822 051 10008	0Ω 5% 0.25W

5401	4822 156 20966	47µH
5401	4822 157 71295	100µH
5530	4822 152 20559	390µH 10%

6301	4822 130 30842	BAV21
6302	4822 130 81015	LLZ-C10
6303	4822 130 80877	BAV103
6331	4822 130 80877	BAV103
6345	4822 130 82192	LLZ-C8V2
6361	4822 130 30842	BAV21
6383	4822 130 80446	LL4148
6411	4822 130 32831	BZX79-F3V0
6421▲	4822 130 30621	1N4148
6422	4822 130 81512	LLZ-C6V2
6423	4822 130 34382	BZX79-F8V2
6518	4822 130 80446	LL4148
6519	4822 130 80446	LL4148

7302	4822 130 41773	BF869
7303▲	5322 130 41982	BC848B
7304	4822 130 41782	BF422
7305	4822 130 41646	BF423
7331	4822 130 41773	BF869
7333▲	5322 130 41982	BC848B
7334	4822 130 41782	BF422
7335	4822 130 41646	BF423
7345	5322 130 41983	BC858B
7361	4822 130 41773	BF869
7363▲	5322 130 41982	BC848B
7364	4822 130 41782	BF422
7365	4822 130 41646	BF423
7383	4822 130 41782	BF422
7391	4822 130 41646	BF423
7411	4822 130 40937	BC548B
7530	5322 130 60159	BC846B
7533	4822 130 63015	BD440
7534	4822 130 44283	BC636
7537▲	5322 130 41982	BC848B
7538▲	5322 130 41982	BC848B

1003 Euro module [F]

Various

	4822 267 30631	2P cinch female
	4822 267 50621	7P male white
▲	4822 267 50721	9P male white
▲	4822 267 60243	Euroconnector blue
	4822 256 91879	Holder
1003	4822 212 31624	Euro module (non teletext)
1003	4822 212 31625	Euro module (teletext)
1003	4822 212 31626	Euro module (3RD scart + teletext)
1816▲	4822 252 51169	Fuse 250 mA
1910	4822 242 73552	Crystal 13.875MHz

2200	4822 121 51299	1nF 10% 50V
2201▲	4822 124 40433	47µF 20% 25V
2202	4822 121 51299	1nF 10% 50V
2203▲	4822 124 40433	47µF 20% 25V
2204	4822 122 31211	100pF 10% 500V
2205	4822 121 51252	470nF 5% 63V
2206	4822 122 31211	100pF 10% 500V
2207	4822 121 51252	470nF 5% 63V
2208	4822 121 51252	470nF 5% 63V
2209	4822 121 51252	470nF 5% 63V
2210	4822 121 51252	470nF 5% 63V
2211▲	4822 124 40433	47µF 20% 25V
2212▲	4822 124 40433	47µF 20% 25V
2213	4822 121 41857	10nF 5% 250V
2214	4822 121 41857	10nF 5% 250V
2215	5322 124 41431	22µF 20% 35V
2216	5322 124 41431	22µF 20% 35V
2217	4822 124 40198	470µF 20% 16V
2218	5322 124 41431	22µF 20% 35V
2219	5322 124 41431	22µF 20% 35V
2220	4822 122 31116	2.2nF 10% 500V
2221	4822 122 31116	2.2nF 10% 500V
2222	4822 122 31116	2.2nF 10% 500V
2223	4822 122 31116	2.2nF 10% 500V
2800	4822 124 41643	100µF 20% 16V
2805	4822 124 40198	470µF 20% 16V
2806	5322 124 41431	22µF 20% 35V
2807▲	4822 124 40246	4.7µF 20% 63V
2808▲	4822 124 40246	4.7µF 20% 63V
2810	4822 124 41643	100µF 20% 16V
2813▲	4822 124 40246	4.7µF 20% 63V
2814	4822 121 41856	22nF 5% 250V
2822	4822 126 13161	100nF 10% 25V
2825	4822 122 32139	12pF 2% 63V
2826	4822 122 32139	12pF 2% 63V
2830	5322 121 42386	100nF 5% 63V
2832	5322 122 32531	100pF 5% 50V
2833▲	4822 124 40196	220µF 20% 16V
2834	4822 126 12944	47nF 10% 50V
2835▲	4822 124 40246	4.7µF 20% 63V
2837	5322 122 32269	6.8pF 5% 50V
2838	4822 124 41643	100µF 20% 16V
2890	4822 126 13161	100nF 10% 25V
2900▲	4822 124 40246	4.7µF 20% 63V
2901▲	4822 124 40433	47µF 20% 25V
2908	4822 122 31211	100pF 10% 500V
2909	4822 122 31211	100pF 10% 500V
2910▲	4822 122 33177	10nF 20% 50V
2911	5322 126 10794	220pF 5% 63V
2912	5322 122 32481	15pF 5% 50V
2913	5322 122 32481	15pF 5% 50V
2914	4822 126 13161	100nF 10% 25V
2915	4822 126 13161	100nF 10% 25V
2916	5322 126 10794	220pF 5% 63V
2917▲	4822 122 33177	10nF 20% 50V
2918	5322 122 32452	47pF 5% 63V
2920	4822 126 13161	100nF 10% 25V
2925▲	4822 122 33177	10nF 20% 50V
2926	5322 124 41431	22µF 20% 35V
2927	4822 124 41643	100µF 20% 16V

3200	4822 116 52211	150Ω 5% 0.5W
3201	4822 051 20563	56k 5% 0.1W
3202	4822 116 52211	150Ω 5% 0.5W
3203	4822 051 20563	56k 5% 0.1W
3204	4822 050 11002	1k 1% 0.4W
3205	4822 050 11002	1k 1% 0.4W
3206	4822 051 20334	330k 5% 0.1W
3207	4822 051 20334	330k 5% 0.1W
3208▲	4822 116 52272	330k 5% 0.5W
3209	4822 051 20334	330k 5% 0.1W
3210	4822 051 20333	33k 5% 0.1W
3211	4822 051 20332	3k3 5% 0.1W
3212	4822 051 20333	33k 5% 0.1W
3213	4822 051 20332	3k3 5% 0.1W
3214	4822 051 20563	56k 5% 0.1W
3215	4822 051 20563	56k 5% 0.1W
3216	4822 116 52201	75Ω 5% 0.5W
3217	4822 116 52201	75Ω 5% 0.5W
3218	4822 051 20153	15k 5% 0.1W
3220	4822 051 20153	15k 5% 0.1W
3222	4822 051 20562	5k6 5% 0.1W
3223	4822 051 20562	5k6 5% 0.1W
3224	4822 051 20562	5k6 5% 0.1W

BTB = Board To Board; WTB = Wire To Board

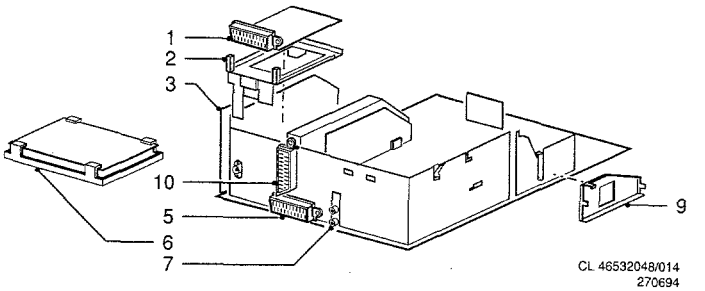
Spare parts list / Stükliste / Liste des pièces

3966	4822 051 20332	3k3 5% 0.1W
3967	4822 051 20104	100k 5% 0.1W
3968	4822 051 20104	100k 5% 0.1W
3969	4822 051 20683	68k 5% 0.1W
3970	4822 051 20683	68k 5% 0.1W
3971	4822 051 20153	15k 5% 0.1W
3972▲	4822 116 52233	10k 5% 0.5W
3973	4822 051 20222	2k2 5% 0.1W
3974	4822 116 80173	10k 5% 0.5W
3975	4822 116 52201	75Ω 5% 0.5W
3976	4822 050 11002	1k 1% 0.4W
3977	4822 116 52175	100Ω 5% 0.5W
3978	4822 116 52201	75Ω 5% 0.5W
3979	4822 116 52175	100Ω 5% 0.5W
3980	4822 051 20221	220Ω 5% 0.1W
3981	4822 051 20471	470Ω 5% 0.1W
3982	4822 051 20101	100Ω 5% 0.1W
3983	4822 051 20471	470Ω 5% 0.1W
3985▲	4822 116 52256	2k2 5% 0.5W
3986	4822 116 52296	6k8 5% 0.5W
3987	4822 116 80175	4k7 5% 0.5W
3988	4822 051 20182	1k8 5% 0.1W
3989	4822 051 20182	1k8 5% 0.1W
3990	4822 116 52175	100Ω 5% 0.5W
3991	4822 116 52211	150Ω 5% 0.5W
3992	4822 116 52211	150Ω 5% 0.5W

5950	4822 157 53634	5.6µH 10%

6950	4822 130 80446	LL4148

7950	5322 209 10576	HEF4053BP
7951	5322 130 42136	BC848C
7952	5322 130 42136	BC848C
7953	5322 130 42136	BC848C
7954	5322 130 42136	BC848C
7975	5322 130 42136	BC848C
7976	5322 130 42136	BC848C
7977	4822 130 42513	BC858C
7978	4822 130 42513	BC858C
7979	5322 130 42136	BC848C



CL 46532048/014
270694

Mechanical parts list

1	4822 267 60366	*Third scart euroconnector*
2	4822 404 31322	3rd scart holder
3	Not applicable	
5	4822 267 60243	Euroconnector
6	4822 403 70926	Sep. mains holder
7	4822 267 30631	2 Fold cinch
9	4822 404 31317	Mains filter bracket
10	4822 267 60243	Euroconnector

BTB = Board To Board; WTB = Wire To Board

1003 IF module [J/K/L/M]

Various

	4822 265 31059	5P red
1003	4822 212 31618	IF module Nicam PAL I
1003	*4822 212 31619*	*IF module Stereo PAL BG*
1003	4822 212 31621	IF module Nicam PAL BG
1003	4822 212 31622	IF module Stereo P/S BGLI
1003	4822 212 31623	IF module Stereo P/S BG/DK
1000	4822 242 80295	SAW 38.9 MHz Stereo PAL BG
1000	4822 242 81436	SAW 38.9 MHz Stereo P/S
1000	4822 242 81717	SAW 38.9 MHz NICAM PAL BG
1000	4822 242 81718	SAW 38.9 MHz NICAM PAL I
1001	4822 153 30025	6.0 MHz
1001	4822 242 72211	5.5 MHz
1100	4822 242 70714	5.5 MHz
1100	4822 242 71713	6.0 MHz
1101	*4822 242 70485*	*5.74 MHz*
1102	4822 242 70714	5.5 MHz
1102	4822 242 71713	6.0 MHz
1102	4822 242 72057	6.5 MHz
1103	4822 242 81423	38.9 MHz P/S BGLI
1103	4822 242 81716	38.9 MHz P/S BGDK
1104	4822 242 81715	33.4 MHz
1200	4822 242 81813	Crystal 10 MHz
1300	4822 242 81187	Crystal 11.700 MHz
1300	4822 242 81188	Crystal 13.104 MHz
1301	4822 242 81719	Crystal 8.192 MHz
1302	4822 242 72301	TH316BOM-20800 DAF
1302	4822 242 72303	TH316BQM

⊣⊢

2000	4822 126 13159	180pF 5% 50V
2001	4822 126 13162	56pF 5% 50V
2002	4822 126 13161	100nF 10% 25V
2003	4822 124 41576	2.2µF 20% 50V
2004	4822 122 32927	220nF 20% 50V
2004	4822 126 13061	220nF 20% 25V
2005▲	5322 126 10223	4.7nF 10% 63V
2007	5322 122 31866	6.8nF 10% 63V
2007▲	5322 126 10223	4.7nF 10% 63V
2008	4822 126 13161	100nF 10% 25V
2008	4822 126 13346	39nF 10% 50V
2009	4822 124 41576	2.2µF 20% 50V
2010▲	4822 124 40246	4.7µF 20% 63V
2010▲	4822 124 40433	47µF 20% 25V
2011	5322 122 32269	6.8pF 5% 50V
2011	5322 122 32286	3.3pF 5% 50V
2012▲	4822 122 33177	10nF 20% 50V
2013	4822 126 13161	100nF 10% 25V
2014	4822 122 33496	100nF 10% 63V
2015	4822 124 41643	100µF 20% 16V
2016▲	4822 122 33177	10nF 20% 50V
2017	4822 126 13161	100nF 10% 25V
2018	4822 122 32646	5.6nF 10% 50V
2018	4822 126 13161	100nF 10% 25V
2020	5322 122 33537	1.2pF 5% 63V
2021	5322 122 33063	2.2pF 5% 50V
2100	5322 124 41431	22µF 20% 35V
2101	5322 124 41431	22µF 20% 35V
2102▲	5322 126 10223	4.7nF 10% 63V
2103▲	5322 126 10223	4.7nF 10% 63V
2106▲	5322 126 10223	4.7nF 10% 63V
2107	4822 124 41576	2.2µF 20% 50V
2108▲	5322 126 10223	4.7nF 10% 63V
2200	4822 122 33219	1.8nF 10% 50V
2201	4822 051 10008	Jumper
2202▲	4822 122 33177	10nF 20% 50V
2203	4822 126 13161	100nF 10% 25V
2204	4822 126 13161	100nF 10% 25V
2205▲	4822 122 33342	33nF 10% 63V
2206	4822 122 32646	5.6nF 10% 50V
2207	4822 122 32646	5.6nF 10% 50V
2208▲	4822 122 33342	33nF 10% 63V
2209	4822 122 33128	15nF 10% 63V
2210	4822 122 33128	15nF 10% 63V
2211	4822 126 13161	100nF 10% 25V
2212	4822 126 13161	100nF 10% 25V
2214	4822 124 40248	10µF 20% 63V
2215▲	*4822 124 40196*	*220µF 20% 16V*
2216▲	4822 124 40246	4.7µF 20% 63V
2217	4822 124 41643	100µF 20% 16V
2218▲	4822 124 40433	47µF 20% 25V
2219▲	4822 124 40246	4.7µF 20% 63V
2220▲	4822 124 40196	220µF 20% 16V
2221▲	4822 124 40196	220µF 20% 16V
2222	5322 121 42498	680nF 5% 63V
2223	5322 121 42498	680nF 5% 63V
2224	4822 122 32927	220nF 20% 50V
2225	4822 122 32927	220nF 20% 50V
2226	4822 124 41643	100µF 20% 16V
2227	4822 124 41643	100µF 20% 16V
2228	4822 124 41643	100µF 20% 16V
2228	4822 124 80702	100µF 20% 25V
2229	4822 124 41643	100µF 20% 16V
2230	5322 124 41431	22µF 20% 35V
2231	5322 124 41431	22µF 20% 35V
2232	5322 122 34098	10nF 10% 63V
2233	5322 122 34098	10nF 10% 63V
2234	4822 122 32927	220nF 20% 50V
2235	4822 122 32927	220nF 20% 50V
2236	4822 122 32927	220nF 20% 50V
2237	5322 124 41431	22µF 20% 35V
2238	5322 124 41431	22µF 20% 35V
2300	4822 121 42408	220nF 5% 63V
2301	4822 126 13161	100nF 10% 25V
2302	*4822 126 13161*	*100nF 10% 25V*
2303	4822 122 33514	68pF 5% 50V
2304	5322 122 31863	330pF 5% 50V
2305	4822 126 13161	100nF 10% 25V
2306	5322 122 33538	150pF 2% 63V
2307	5322 122 33538	150pF 2% 63V
2308▲	5322 122 34123	1nF 10% 50V
2309	4822 126 13161	100nF 10% 25V
2310	5322 122 31863	330pF 5% 50V
2311	5322 122 31866	6.8nF 10% 63V
2312	5322 122 31863	330pF 5% 50V
2313▲	4822 124 40433	47µF 20% 25V
2318	5322 122 31863	330pF 5% 50V
2319	4822 122 33514	68pF 5% 50V
2320▲	4822 122 33172	390pF 5% 50V
2321▲	5322 122 34123	1nF 10% 50V
2322▲	4822 122 33177	10nF 20% 50V
2323▲	5322 122 32654	22nF 10% 63V
2324	5322 121 42661	330nF 5% 63V
2325▲	5322 122 34123	1nF 10% 50V
2328▲	4822 122 33177	10nF 20% 50V
2329	5322 122 32659	33pF 5% 50V
2330	5322 122 32659	33pF 5% 50V
2331	5322 122 32531	100pF 5% 50V
2332	5322 122 32531	100pF 5% 50V
2333▲	4822 122 33177	10nF 20% 50V
2334	4822 126 13161	100nF 10% 25V
2335	4822 126 13161	100nF 10% 25V
2336▲	4822 124 40433	47µF 20% 25V
2340▲	4822 122 33177	10nF 20% 50V
2343	4822 122 33219	1.8nF 10% 50V
2343▲	5322 122 32654	22nF 10% 63V
2344	4822 122 33219	1.8nF 10% 50V
2344▲	5322 122 32654	22nF 10% 63V
2347	4822 124 41643	100µF 20% 16V

⊣□⊢

3000	4822 116 52211	150Ω 5% 0.5W
3001	4822 101 11192	22k 30% LIN 0.1W
3002	4822 051 20181	180Ω 5% 0.1W
3004	4822 116 52289	5k6 5% 0.5W
3011	4822 051 20223	22k 5% 0.1W
3011	4822 116 52257	22k 5% 0.5W
3012	4822 051 20223	22k 5% 0.1W
3013	4822 051 20101	100Ω 5% 0.1W
3013	4822 051 20151	150Ω 5% 0.1W
3013	4822 051 20181	180Ω 5% 0.1W
3013	4822 051 20271	270Ω 5% 0.1W
3013	4822 051 20391	390Ω 5% 0.1W
3014	4822 051 20123	12k 5% 0.1W
3015	4822 051 20223	22k 5% 0.1W
3016	4822 051 20562	5k6 5% 0.1W
3018	4822 051 20106	10M 5% 0.1W
3019	4822 051 20474	470k 5% 0.1W
3024	4822 051 20562	5k6 5% 0.1W
3026▲	4822 052 10109	10Ω 5% 0.33W
3027	4822 051 20122	1k2 5% 0.1W
3031	4822 051 20222	2k2 5% 0.1W
3033	4822 053 10688	6Ω8 5% 1W
3034	4822 051 20101	100Ω 5% 0.1W
3098	4822 051 20104	100k 5% 0.1W
3098	4822 051 20223	22k 5% 0.1W
3098	4822 051 20224	220k 5% 0.1W
3098	4822 051 20564	560k 5% 0.1W
3098	4822 051 20822	8k2 5% 0.1W
3100	4822 051 20561	560Ω 5% 0.1W
3101	4822 051 20561	560Ω 5% 0.1W
3102	4822 051 20561	560Ω 5% 0.1W
3103	4822 051 20222	2k2 5% 0.1W
3104	4822 051 20103	10k 5% 0.1W
3106	4822 116 52234	100Ω 5% 0.5W
3107	4822 116 52234	100Ω 5% 0.5W
3108	4822 051 20471	470Ω 5% 0.1W
3109	4822 051 20471	470Ω 5% 0.1W
3113	4822 116 52234	100Ω 5% 0.5W
3114	4822 051 20103	10k 5% 0.1W
3115	*4822 051 20103*	*10k 5% 0.1W*
3116	4822 051 20103	10k 5% 0.1W
3117	4822 051 20222	2k2 5% 0.1W
3200	4822 051 10102	1k 2% 0.25W
3207	4822 051 20822	8k2 5% 0.1W
3208▲	4822 052 10181	180Ω 5% 0.33W
3211	4822 051 20122	1k2 5% 0.1W
3212	4822 051 20223	22k 5% 0.1W
3212	4822 051 20473	47k 5% 0.1W
3214	4822 051 20222	2k2 5% 0.1W
3218	4822 051 20474	470k 5% 0.1W
3219	4822 051 20564	560k 5% 0.1W
3220	4822 051 20563	56k 5% 0.1W
3221	4822 051 20563	56k 5% 0.1W
3222	4822 051 20823	82k 5% 0.1W
3223	4822 051 20333	33k 5% 0.1W
3224	4822 051 20101	100Ω 5% 0.1W
3225	4822 051 20101	100Ω 5% 0.1W
3230	4822 051 20562	5k6 5% 0.1W
3231	4822 051 20332	3k3 5% 0.1W
3232	4822 051 10102	1k 2% 0.25W
3233	4822 051 10102	1k 2% 0.25W
3234	4822 051 20101	100Ω 5% 0.1W
3234▲	4822 052 10181	180Ω 5% 0.33W
3235	4822 051 20101	100Ω 5% 0.1W
3237	4822 051 20823	82k 5% 0.1W
3238	4822 051 20333	33k 5% 0.1W
3240	4822 051 20101	100Ω 5% 0.1W
3241	4822 051 20101	100Ω 5% 0.1W
3300	4822 051 20563	56k 5% 0.1W
3301▲	4822 051 20109	10Ω 5% 0.1W
3302	4822 051 20228	2Ω2 5% 0.1W
3303	4822 051 20392	3k9 5% 0.1W
3304	4822 051 20223	22k 5% 0.1W
3305	4822 051 20223	22k 5% 0.1W
3306	4822 051 20104	100k 5% 0.1W
3307	4822 051 20159	15Ω 5% 0.1W
3308	4822 051 20224	220k 5% 0.1W
3309	4822 051 20823	82k 5% 0.1W
3314	4822 051 20471	470Ω 5% 0.1W
3315	4822 051 20563	56k 5% 0.1W
3316	4822 051 10102	1k 2% 0.25W
3317	4822 051 20105	1M 5% 0.1W
3318	4822 051 20223	22k 5% 0.1W
3319	4822 117 11139	1k5 1% 0.1W
3320	4822 051 20103	10k 5% 0.1W
3321	4822 051 20104	100k 5% 0.1W
3322	4822 051 20273	27k 5% 0.1W
3323	4822 051 20104	100k 5% 0.1W
3324	4822 051 20103	10k 5% 0.1W
3326	4822 051 20681	680Ω 5% 0.1W
3327	4822 051 20182	1k8 5% 0.1W
3328	4822 117 11139	1k5 1% 0.1W
3329	4822 051 20331	330Ω 5% 0.1W
3331	4822 051 20332	3k3 5% 0.1W
3332	4822 051 20332	3k3 5% 0.1W
3333	4822 116 52224	470Ω 5% 0.5W
3334	4822 051 20122	1k2 5% 0.1W
3335	4822 051 20471	470Ω 5% 0.1W
3336	4822 051 20101	100Ω 5% 0.1W
3337	4822 051 20101	100Ω 5% 0.1W
3340	4822 051 20122	1k2 5% 0.1W
3341	4822 051 20471	470Ω 5% 0.1W
4xxx	4822 051 10008	0Ω 5% 0.25W

⌒

5000	4822 157 61898	0.47µH 10%
5001	4822 157 71099	0.28µH 10%
5002	4822 157 53066	15µH 10%
5002	4822 157 53303	12µH 10%
5002	4822 157 53634	5.6µH 10%
5002	4822 157 62767	8.2µH
5004	4822 157 53302	1µH
5004	4822 157 53539	0.27µH 5%
5100	4822 157 71098	1.8µH
5201	4822 157 71296	1500µH
5300	4822 157 50975	1 mH
5301	4822 157 50975	1 mH

⊣▶|

6003	4822 130 80446	LL4148
6007	4822 130 80954	LLZ-C5V6
6007	4822 130 81227	LLZ-F5V6
6100	4822 130 80888	BA682
6106	4822 130 80888	BA682
6107	4822 130 80888	BA682
6200	4822 130 80446	LL4148
6201	4822 130 80446	LL4148
6202	4822 130 82192	LLZ-C8V2
6203	4822 130 80446	LL4148
6204	4822 130 80446	LL4148
6205	*4822 130 82192*	*LLZ-C8V2*
6206	4822 130 80446	LL4148
6207	4822 130 80446	LL4148
6208	4822 130 80446	LL4148
6209	4822 130 80446	LL4148
6300	4822 130 80446	LL4148
6301	5322 130 34689	BBY31
6302	5322 130 80119	BBY40

IC

7001	5322 209 10576	HEF4053BP
7004	4822 209 33707	TDA9815/V2
7005	5322 130 42136	BC848C
7008	4822 130 44121	BC338
7102	5322 130 42136	BC848C
7103	5322 130 42136	BC848C
7104	5322 130 42136	BC848C
7201	5322 130 42136	BC848C
7202	4822 130 42513	BC858C
7203	5322 130 42136	BC848C
7204	4822 209 33706	TDA9861/V1
7205	4822 209 32863	TDA9840/V2
7206	5322 130 42136	BC848C
7207	5322 130 42136	BC848C
7208	5322 130 42136	BC848C
7209	4822 130 42513	BC858C
7302	5322 130 42136	BC848C
7303	5322 130 42136	BC848C
7304	4822 209 30909	TDA8732/C1
7305	4822 209 32959	SAA7282AZP
7306	5322 130 42136	BC848C
7307	5322 130 42136	BC848C

1006 Third scart module [N]

Various

	4822 265 31214	3P male black
▲	4822 267 50721	9P male white
	4822 267 51276	*9P female white*
	4822 267 60366	Euroconnector
1006	4822 212 31631	Third scart module

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2950	4822 124 41643	100µF 20% 16V
2951	4822 122 31116	2.2nF 10% 500V
2952	4822 122 31116	2.2nF 10% 500V
2953	4822 122 31211	100pF 10% 500V
2954	4822 122 31211	100pF 10% 500V
2955	4822 121 51252	470nF 5% 63V
2956	4822 121 51252	470nF 5% 63V
2957	4822 121 51252	470nF 5% 63V
2958	4822 121 51252	470nF 5% 63V
2959	4822 121 51252	470nF 5% 63V
2960	4822 122 32927	220nF 20% 50V
2961	4822 122 32927	220nF 20% 50V
2962	4822 122 32927	220nF 20% 50V
2963	4822 122 32927	220nF 20% 50V
2964	4822 122 31116	2.2nF 10% 500V
2965	4822 122 31116	2.2nF 10% 500V
2975	4822 124 41643	100µF 20% 16V
2978▲	4822 124 40246	4.7µF 20% 63V
2980	4822 126 13161	100nF 10% 25V
2981	4822 121 41856	22nF 5% 250V

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3951	4822 116 52211	150Ω 5% 0.5W
3952	4822 116 52211	150Ω 5% 0.5W
3953▲	4822 116 52269	3k3 5% 0.5W
3954▲	4822 116 52269	3k3 5% 0.5W
3955	4822 051 20334	330k 5% 0.1W
3956	4822 051 20334	330k 5% 0.1W
3957	4822 051 20334	330k 5% 0.1W
3958	4822 051 20334	330k 5% 0.1W
3959	4822 051 20332	3k3 5% 0.1W
3960	4822 051 20332	3k3 5% 0.1W
3961	4822 051 20683	68k 5% 0.1W
3962	4822 051 20683	68k 5% 0.1W
3963	4822 051 20104	100k 5% 0.1W
3964	4822 051 20332	3k3 5% 0.1W
3965	4822 051 20104	100k 5% 0.1W

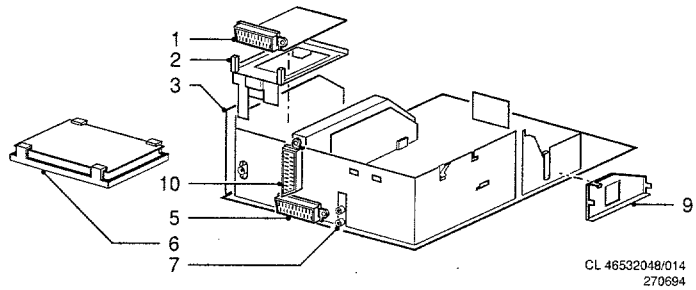
BTB = Board To Board; WTB = Wire To Board

3966	4822 051 20332	3k3 5% 0.1W
3967	4822 051 20104	100k 5% 0.1W
3968	4822 051 20104	100k 5% 0.1W
3969	4822 051 20683	68k 5% 0.1W
3970	4822 051 20683	68k 5% 0.1W
3971	4822 051 20153	15k 5% 0.1W
3972▲	4822 116 52233	10k 5% 0.5W
3973	4822 051 20222	2k2 5% 0.1W
3974	4822 116 80173	10k 5% 0.5W
3975	4822 116 52201	75Ω 5% 0.5W
3976	4822 050 11002	1k 1% 0.4W
3977	4822 116 52175	100Ω 5% 0.5W
3978	4822 116 52201	75Ω 5% 0.5W
3979	4822 116 52175	100Ω 5% 0.5W
3980	4822 051 20221	220Ω 5% 0.1W
3981	4822 051 20471	470Ω 5% 0.1W
3982	4822 051 20101	100Ω 5% 0.1W
3983	4822 051 20471	470Ω 5% 0.1W
3985▲	4822 116 52256	2k2 5% 0.5W
3986	4822 116 52296	6k8 5% 0.5W
3987	4822 116 80175	4k7 5% 0.5W
3988	4822 051 20182	1k8 5% 0.1W
3989	4822 051 20182	1k8 5% 0.1W
3990	4822 116 52175	100Ω 5% 0.5W
3991	4822 116 52211	150Ω 5% 0.5W
3992	4822 116 52211	150Ω 5% 0.5W

5950	4822 157 53634	5.6µH 10%

6950	4822 130 80446	LL4148

7950	5322 209 10576	HEF4053BP
7951	5322 130 42136	BC848C
7952	5322 130 42136	BC848C
7953	5322 130 42136	BC848C
7954	5322 130 42136	BC848C
7975	5322 130 42136	BC848C
7976	5322 130 42136	BC848C
7977	4822 130 42513	BC858C
7978	4822 130 42513	BC858C
7979	5322 130 42136	BC848C



CL 46532048/014
270694

Mechanical parts list

1	4822 267 60366	Third scart euroconnector
2	4822 404 31322	3rd scart holder
3	Not applicable	
5	4822 267 60243	Euroconnector
6	4822 403 70926	Sep. mains holder
7	4822 267 30631	2 Fold cinch
9	4822 404 31317	Mains filter bracket
10	4822 267 60243	Euroconnector

BTB = Board To Board; WTB = Wire To Board